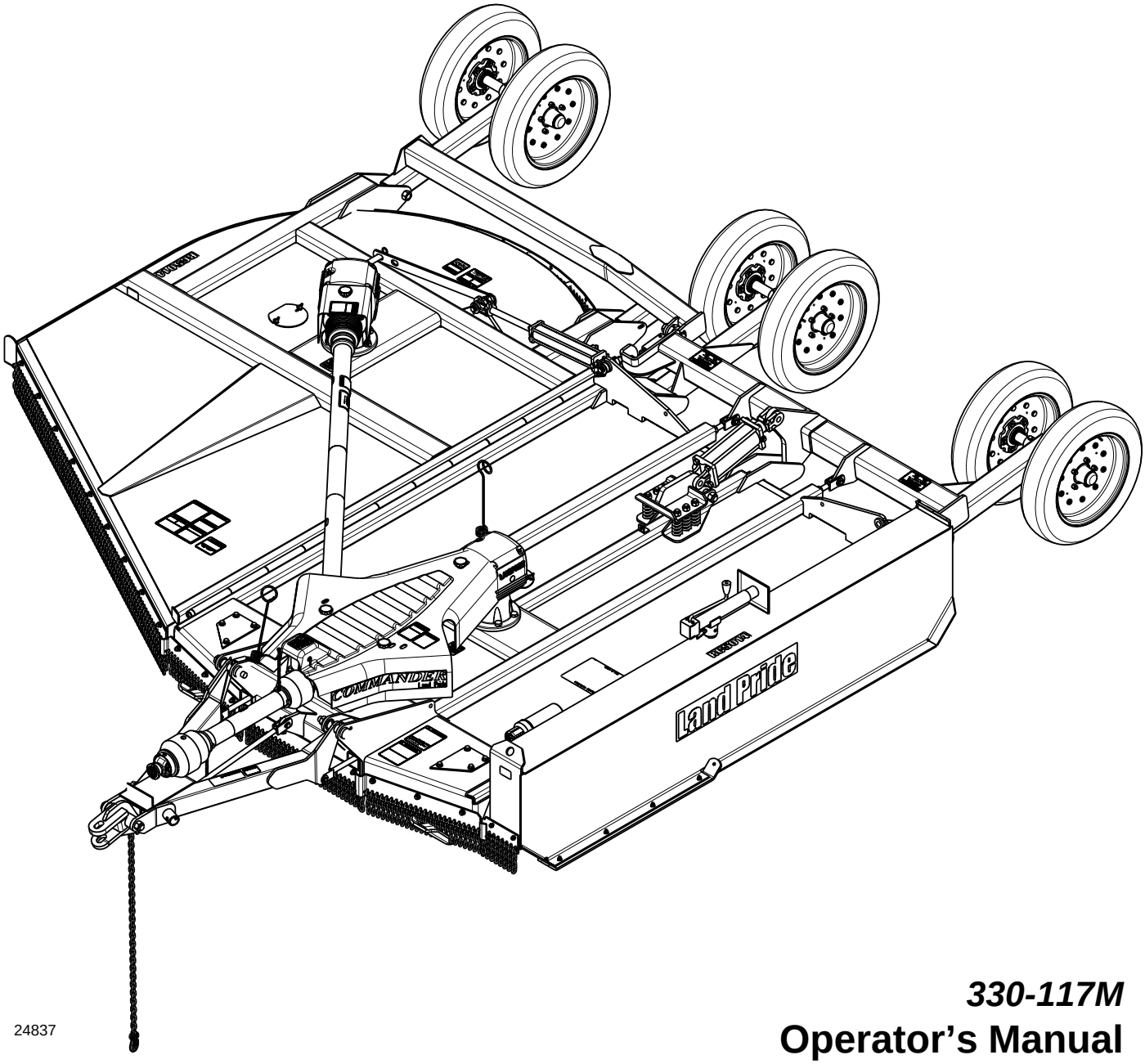
Table of Contents

Rotary Cutters

RC5014 (540 RPM) and RCM5014 (1000 RPM)



24837

330-117M

Operator's Manual

Read the Operator's manual entirely. When you see this symbol, the subsequent instructions and warnings are serious - follow without exception. Your life and the lives of others depend on it!

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Cover photo may show optional equipment not supplied with standard unit.

Important Safety Information 1
Safety at All Times 1
Look For The Safety Alert Symbol 1
Safety Labels 4
Introduction 10
Application 10
Using This Manual 10
Terminology 10
Definitions 10
Owner Assistance 10
Serial Number Plate 10
Free Maintenance Video 10
Further Assistance 10
Section 1: Assembly and Set-up 11
Tractor Requirements 11
Horsepower 11
Hitch 11
Hydraulic Outlets 11
PTO Speed 11
Before You Start 11
Torque Requirements 11
Hitch Types 12
Standard Clevis Hitch 12
Pintle Hitch (Optional) 12
Hitch Assembly 12
Wing Axle Assembly 12
Tractor Hook-up 13
Driveline Installation 13
Check Driveline Length 14
Hydraulic Hook-up 14
Unhooking From the Cutter 15
Section 2: Adjustments 16
Center and Wing Section Leveling 16
Cutting Height Adjustment 16
Section 3: Operating Instructions 17
Pre-Start Checklist 17
Inspection Procedures 17
Transport Locks 18
Transporting 18
Field Set-up 19
Operating Speed 19
Wing Operating Angle 19
Driveline Turning Angle 20
General Operating Instructions 20
Section 4: Options 22
Safety Guard Options 22
Wheel Options 22
Driveline Options 22
Hydraulic Accessories 23
Hitch Options 23
Section 5: Maintenance & Lubrication . . 24
General Maintenance Information 24
Tractor Maintenance 24
Cutter Blade Maintenance 24
Drivelines With Slip Clutches 25
Type A Clutches 26
Type B Clutches 27
Skid Shoe Maintenance 28
Center Skid Shoe 28
Wing Skid Shoe 29
Weight Box Skid Shoe 29
Storage 29
Lubrication Points 30
Axle Hub Bearing 30
Adjustable Turnbuckle 30
Main Hitch 30
Divider Box 31
Gearbox 31
Intermediate Driveline Joints 32
Conventional Driveline Profile Tubes 32
Conventional Driveline Joints & Shields 32
Constant Velocity Driveline Profile Tubes 33
Constant Velocity Driveline Joints & Shields 33
Wing Driveline Profile Tubes 34
Wing Driveline Joints & Shields 34
Section 6: Specifications& Capacities . . 35
Section 7: Features and Benefits 37
Section 8: Troubleshooting 39
Section 9: Appendix 40
Torque Values Chart 40
Tire Inflation Chart 40
Warranty 41

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Printed in the United States of America.

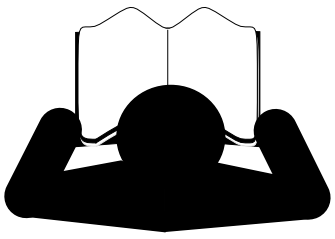
These are common practices that may or may not be applicable to the products described in this manual.

Safety at All Times

Thoroughly read and understand the instructions given in this manual before operation. Refer to the "Safety Label" section, read all instructions noted on them.

Do not allow anyone to operate this equipment who has not fully read and comprehended this manual and who has not been properly trained in the safe operation of the equipment.

- ▲ Operator should be familiar with all functions of the unit.
- ▲ Operate implement from the driver's seat only.
- ▲ Make sure all guards and shields are in place and secured before operating the implement.
- ▲ Do not leave tractor or implement unattended with engine running.
- ▲ Dismounting from a moving tractor could cause serious injury or death.
- ▲ Do not allow anyone to stand between the tractor and implement while backing up to the implement.
- ▲ Keep hands, feet, and clothing away from power-driven parts.
- ▲ Wear snug fitting clothing to avoid entanglement with moving parts.
- ▲ Watch out for wires, trees, etc., when raising implement. Make sure all persons are clear of working area.
- ▲ Turning tractor too tight may cause implement to ride up on wheels. This could result in injury or equipment damage.
- ▲ Do not carry passengers on implement at any time.



Look For The Safety Alert Symbol

The SAFETY ALERT SYMBOL indicates there is a potential hazard to personal safety involved and extra safety precaution must be taken. When you see this symbol, be alert and carefully read the message that follows it. In addition to design and configuration of equipment, hazard control and accident prevention are dependent upon the awareness, concern, prudence and proper training of personnel involved in the operation, transport, maintenance and storage of equipment.

Be Aware of Signal Words

A Signal word designates a degree or level of hazard seriousness. The signal words are:

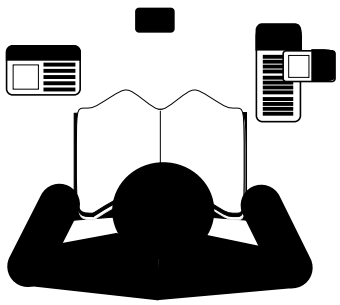
DANGER
Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury. This signal word is limited to the most extreme situations, typically for machine components that, for functional purposes, cannot be guarded.

WARNING
Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices.

CAUTION
Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

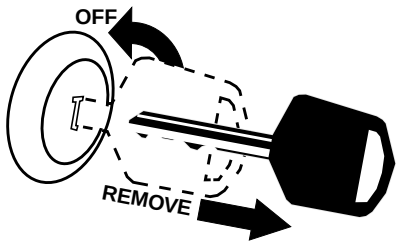
For Your Protection

- ▲ Thoroughly read and understand the "Safety Label" section, read all instructions noted on them.



Shutdown and Storage

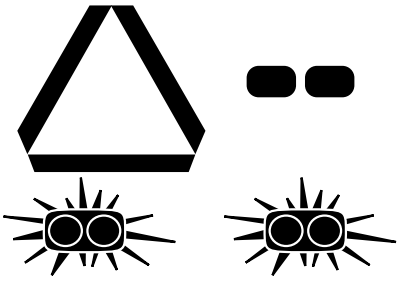
- ▲ Lower machine to ground, put tractor in park, turn off engine, and remove the key.
- ▲ Detach and store implements in a area where children normally do not play. Secure implement by using blocks and supports.



These are common practices that may or may not be applicable to the products described in this manual.

Use Safety Lights and Devices

- ▲ Slow moving tractors, self-propelled equipment, and towed implements can create a hazard when driven on public roads. They are difficult to see, especially at night.
- ▲ Flashing warning lights and turn signals are recommended whenever driving on public roads. Use lights and devices provided with implement.



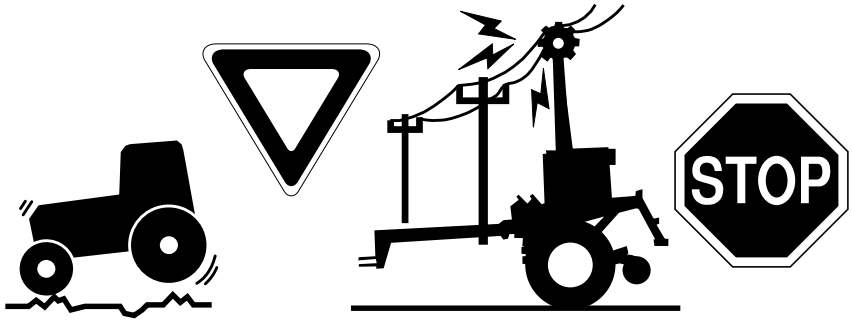
Transport Machinery Safely

- ▲ Comply with state and local laws.
- ▲ Maximum transport speed for implement is 20 mph. DO NOT EXCEED. Never travel at a speed which does not allow adequate control of steering and stopping. Some rough terrain require a slower speed.
- ▲ Sudden braking can cause a towed load to swerve and upset. Reduce speed if towed load is not equipped with brakes.
- ▲ Use the following maximum speed - tow load weight ratios as a guideline:

  20 mph when weight is less than or equal to the weight of tractor.

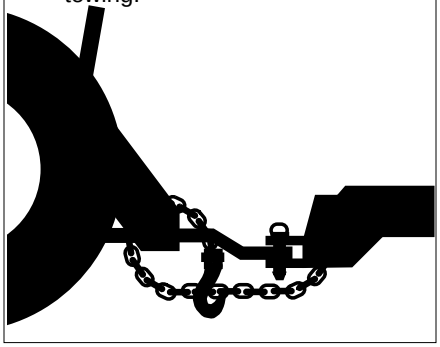
  10 mph when weight is double the weight of tractor.

IMPORTANT: Do not tow a load that is more than double the weight of tractor.



Use A Safety Chain

- ▲ A safety chain will help control drawn machinery should it separate from the tractor drawbar.
- ▲ Use a chain with the strength rating equal to or greater than the gross weight of the towed machinery.
- ▲ Attach the chain to the tractor drawbar support or other specified anchor location. Allow only enough slack in the chain to permit turning.
- ▲ Do not use safety chain for towing.



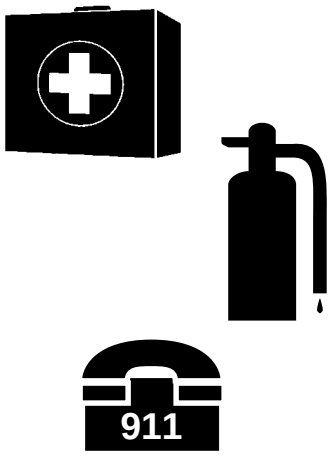
Practice Safe Maintenance

- ▲ Understand procedure before doing work. Use proper tools and equipment, refer to Operator's Manual for additional information.
- ▲ Work in a clean dry area.
- ▲ Lower the implement to the ground, put tractor in park, turn off engine, and remove key before performing maintenance.
- ▲ Allow implement to cool completely.
- ▲ Do not grease or oil implement while it is in operation.
- ▲ Inspect all parts. Make sure parts are in good condition & installed properly.
- ▲ Remove buildup of grease, oil or debris.
- ▲ Remove all tools and unused parts from implement before operation.

These are common practices that may or may not be applicable to the products described in this manual.

Prepare for Emergencies

- ▲ Be prepared if a fire starts.
- ▲ Keep a first aid kit and fire extinguisher handy.
- ▲ Keep emergency numbers for doctor, ambulance, hospital and fire department near phone.



Wear Protective Equipment

- ▲ Protective clothing and equipment should be worn.
- ▲ Wear clothing and equipment appropriate for the job. Avoid loose fitting clothing.
- ▲ Prolonged exposure to loud noise can cause hearing impairment or hearing loss. Wear suitable hearing protection such as earmuffs or earplugs.
- ▲ Operating equipment safely requires the full attention of the operator. Avoid wearing radio headphones while operating machinery.

Avoid High Pressure Fluids Hazard

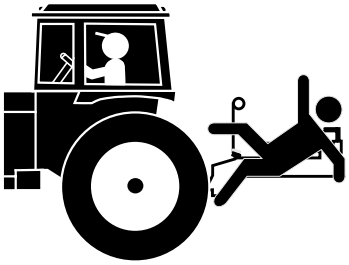
- ▲ Escaping fluid under pressure can penetrate the skin causing serious injury.
- ▲ Avoid the hazard by relieving pressure before disconnecting hydraulic lines or performing work on the system.
- ▲ Make sure all hydraulic fluid connections are tight and all hydraulic hoses and lines are in good condition before applying pressure to the system.
- ▲ Use a piece of paper or cardboard, NOT BODY PARTS, to check for suspected leaks.
- ▲ Wear protective gloves and safety glasses or goggles when working with hydraulic systems.
- ▲ If an accident occurs, see a doctor immediately. Any fluid injected into the skin must be treated within a few hours or gangrene may result.

Tire Safety

- ▲ Tire changing can be dangerous and should be preformed by trained personnel using the correct tools and equipment.
- ▲ When inflating tires, use a clip-on chuck and extension hose long enough to allow you to stand to one side and NOT in front of or over the tire assembly. Use a safety cage if available.
- ▲ When removing and installing wheels, use wheel handling equipment adequate for the weight involved.

Keep Riders Off Machinery

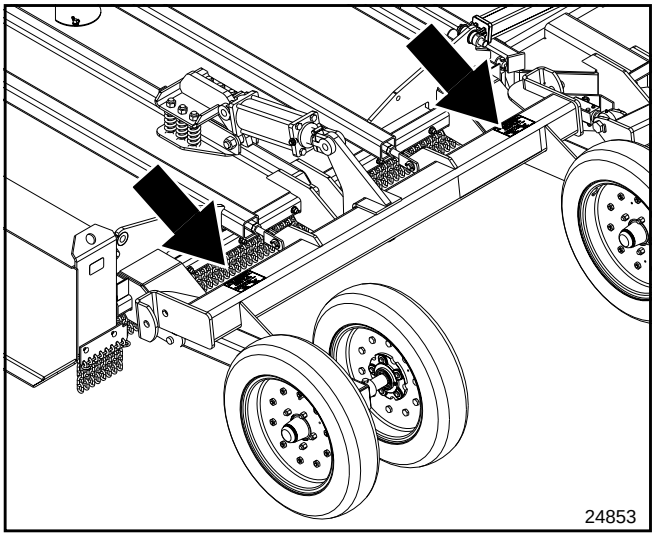
- ▲ Riders obstruct the operator's view. Riders could be struck by foreign objects or thrown from the machine.
- ▲ Never allow children to operate equipment.



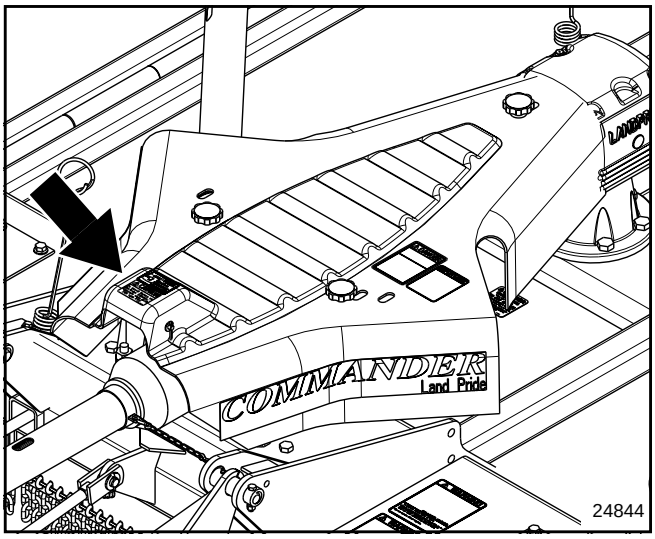
Safety Labels

Your cutter comes equipped with all safety labels in place. They were designed to help you safely operate your implement. Read and follow their directions.

1. *Keep all safety labels clean and legible.*
2. *Replace all damaged or missing labels. To order new labels go to your nearest Land Pride dealer.*
3. *Some new equipment installed during repair requires safety labels to be affixed to the replaced component as specified by Land Pride. When ordering new components make sure the correct safety labels are included in the request.*
4. *Refer to this section for proper label placement. To install new labels:*
   a. *Clean the area the label is to be placed.*
   b. *Spray soapy water on the surface where the label is to be placed.*
   c. *Peel backing from label. Press firmly onto the surface.*
   d. *Squeeze out air bubbles with the edge of a credit card.*

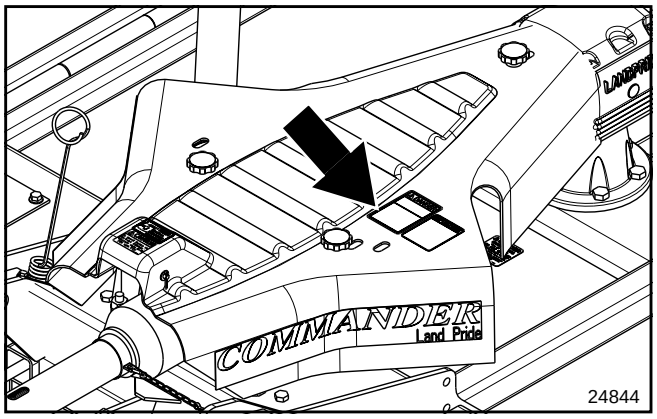


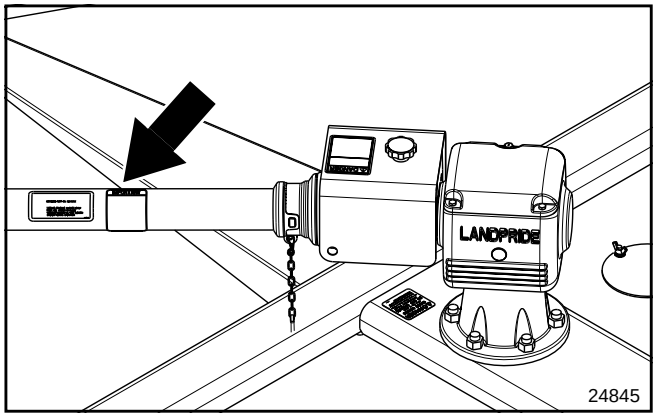
818-045C
Pinch Point Warning

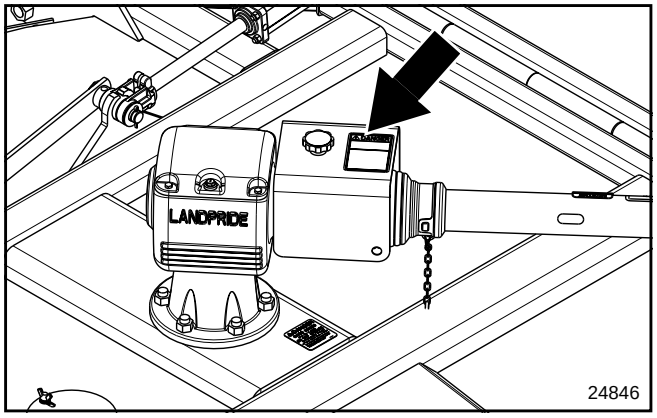


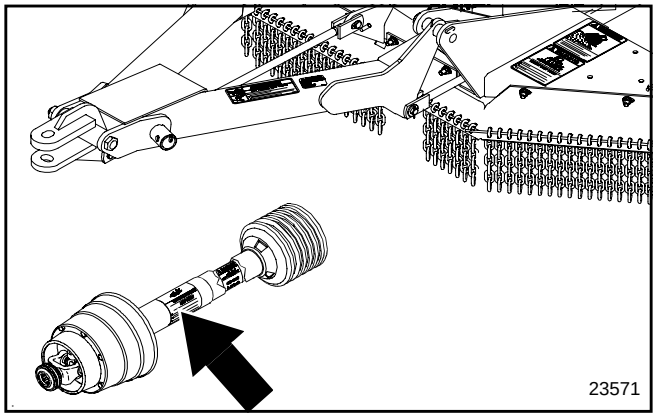
818-130C
Caution! Use 540 rpm PTO only

818-240C
Caution! Use 1000 rpm PTO only





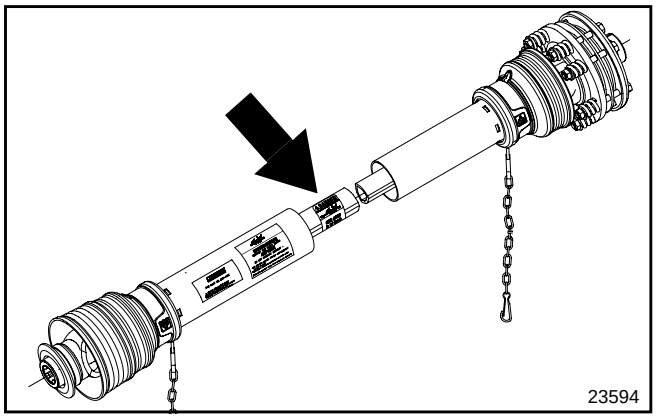


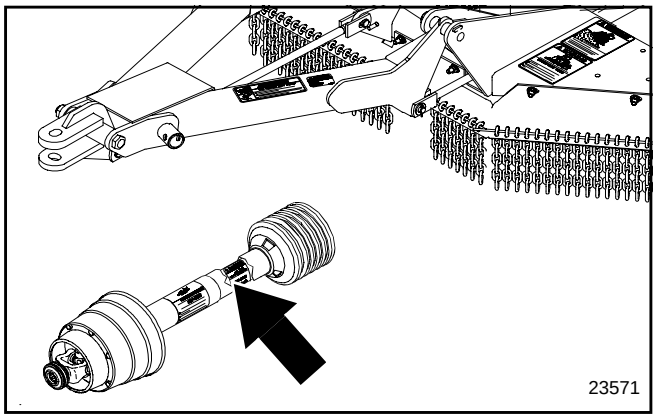


DANGER
ROTATING DRIVELINE
CONTACT CAN CAUSE DEATH
KEEP AWAY!
DO NOT OPERATE WITHOUT –
• All driveline guards, tractor and equipment shields in place
• Drivelines securely attached at both ends.
• Driveline guards that turn freely on Driveline
818–552C

818-552C

Danger! Rotating Driveline Entanglement Hazard

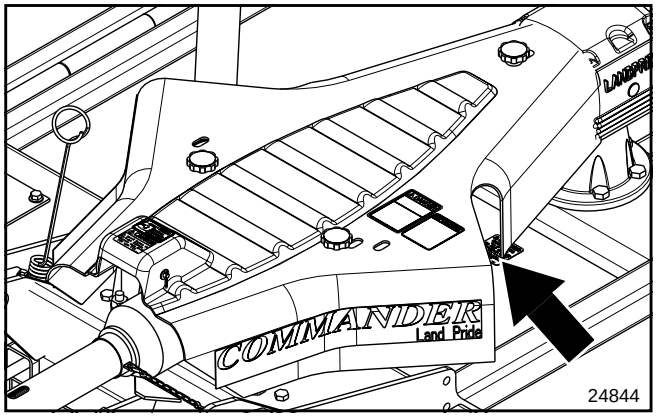


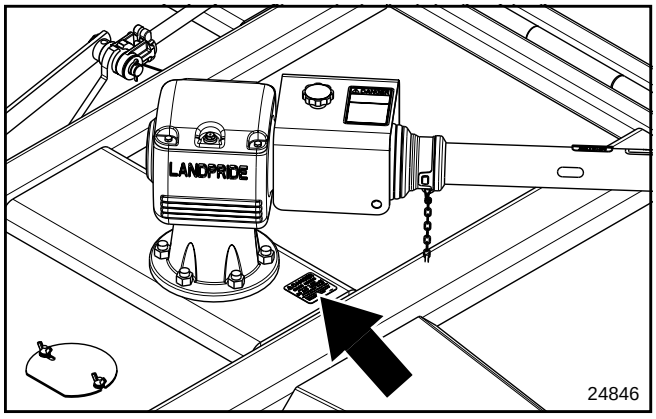


818-540C

Danger! Shield Missing - DO NOT Operate

Wing Driveline & Main Driveline



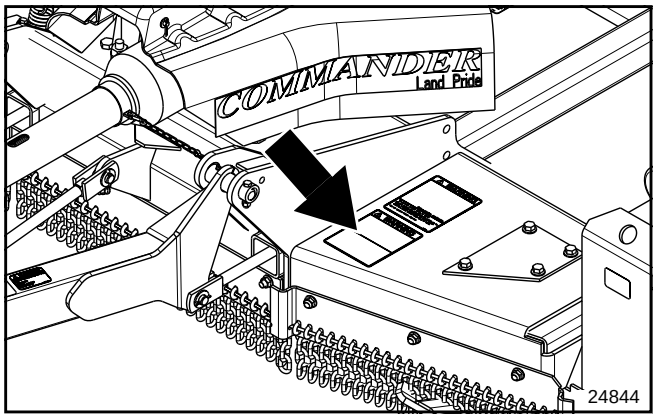


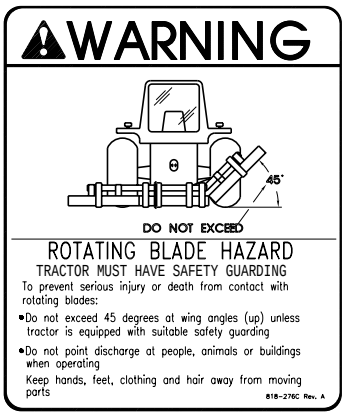
DANGER
GUARD MISSING
When this is visible
DO NOT OPERATE
ENTANGLEMENT HAZARD
can cause Serious Injury or Death
Si no entiende ingles, se prefiere que busque a alquien que interprete las instrucciones para usted.
PHDC 6

818-543C

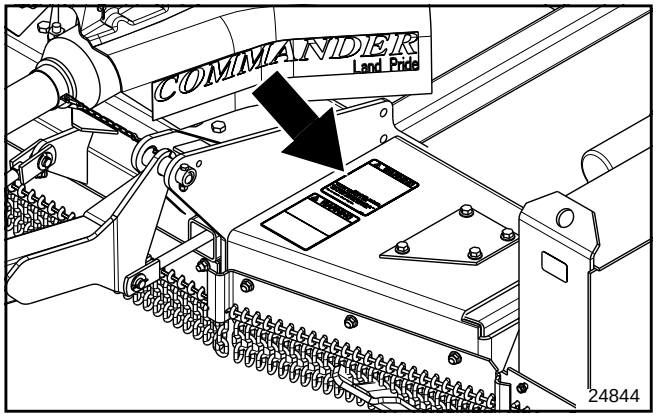
Danger! Guard Missing - DO NOT Operate

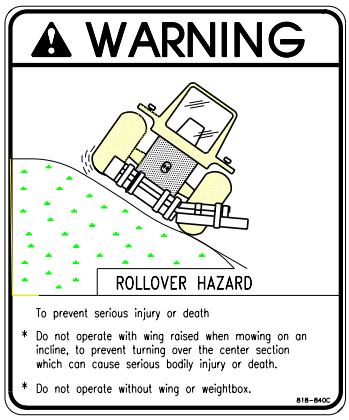
2- places



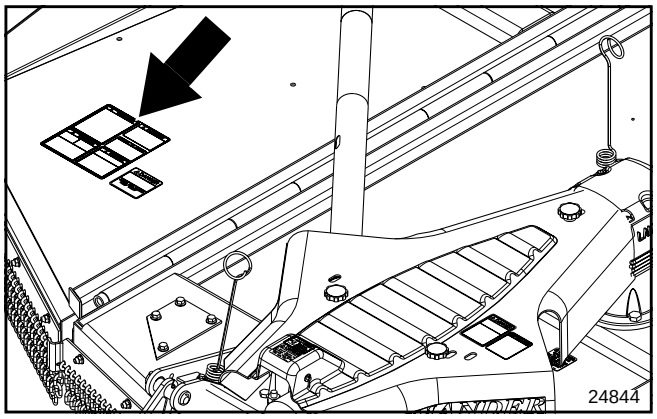

WARNING
θ
45°
DO NOT EXCEED
ROTATING BLADE HAZARD
TRACTOR MUST HAVE SAFETY GUARDING
To prevent serious injury or death from contact with rotating blades:
•Do not exceed 45 degrees at wing angles (up) unless tractor is equipped with suitable safety guarding
•Do not point discharge at people, animals or buildings when operating
Keep hands, feet, clothing and hair away from moving parts
818-276C Rev. A

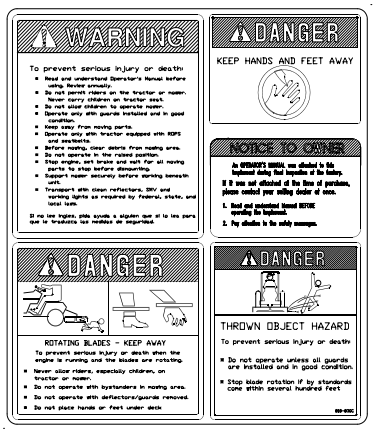
818-276C
Warning! Rotating Blade Hazard




WARNING
ROLLOVER HAZARD
To prevent serious injury or death
* Do not operate with wing raised when mowing on an incline, to prevent turning over the center section which can cause serious bodily injury or death.
* Do not operate without wing or weightbox.
818-840C

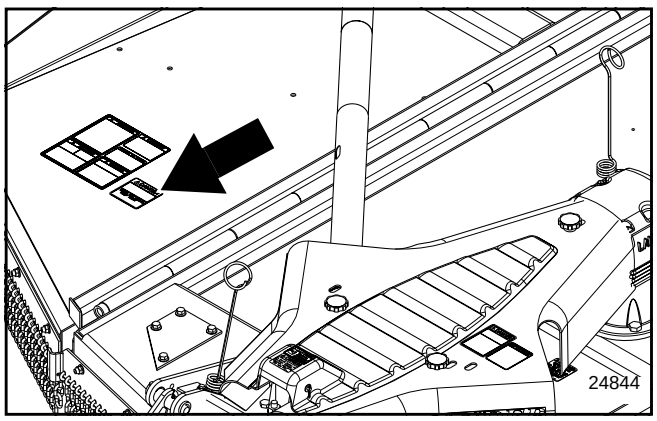
818-840C
Danger: Rollover Hazard





818-830C
Safety Combo

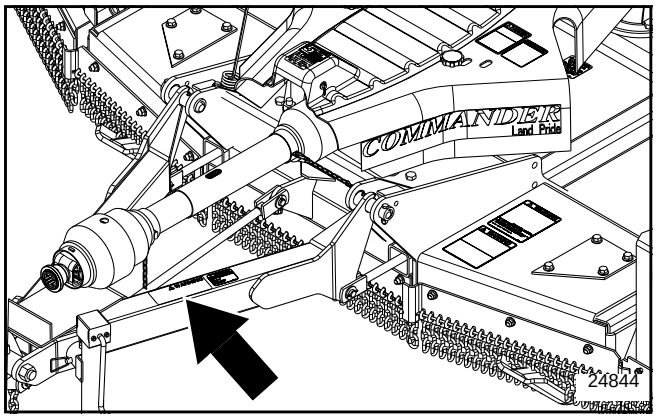
Located on
Left Wing &
Right Wing



DANGER
RAISED WING HAZARD
KEEP AWAY
To prevent serious injury or death:
• Do not transport without transport locks securely engaged.
• Do not walk or work underneath raised wing unless it is securely locked.
818-561C

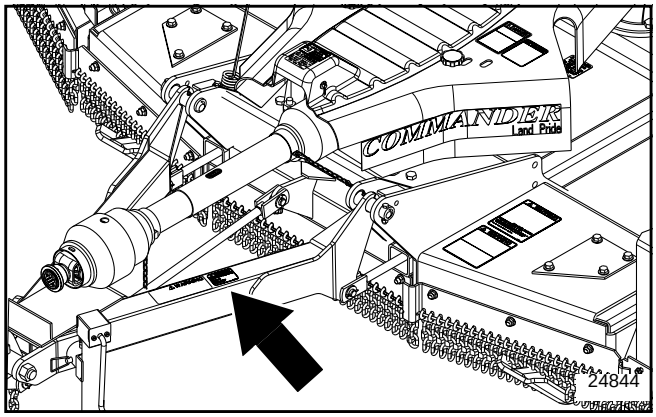
818-561C
Warning! Raised Wing Hazard

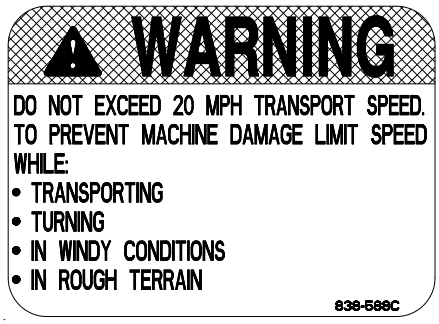
Located on
Left Wing &
Right Wing



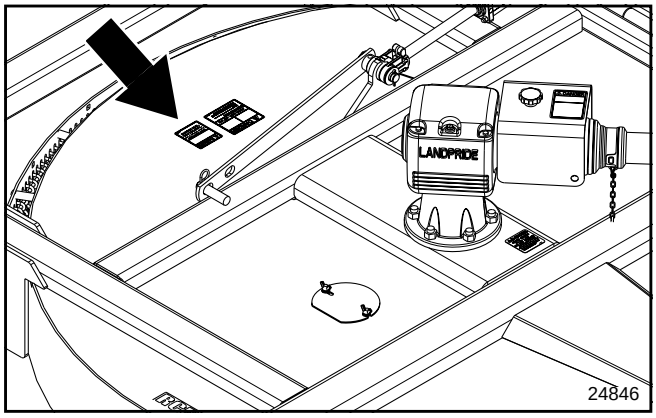
WARNING
HIGH PRESSURE FLUID HAZARD
To prevent serious injury or death:
• Relieve pressure on system before repairing or adjusting or disconnecting.
• Wear proper hand and eye protection when searching for leaks. Use wood or cardboard instead of hands.
• Keep all components in good repair.
838-094C

838-094C
Warning: High Pressure




WARNING
DO NOT EXCEED 20 MPH TRANSPORT SPEED. TO PREVENT MACHINE DAMAGE LIMIT SPEED WHILE:
• TRANSPORTING
• TURNING
• IN WINDY CONDITIONS
• IN ROUGH TERRAIN
838-588C

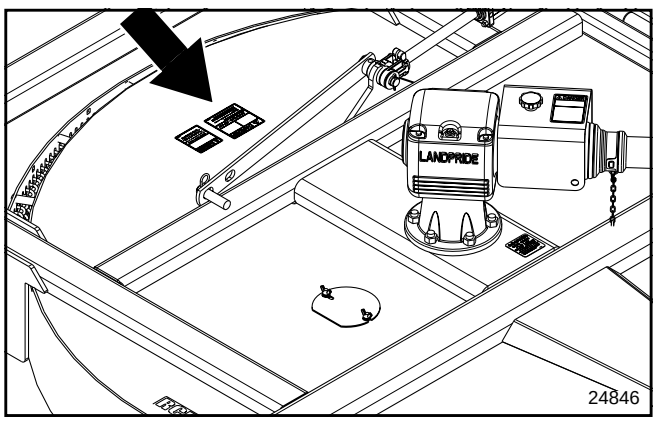
838-588C
Warning: Folding Cutter Speed Warning

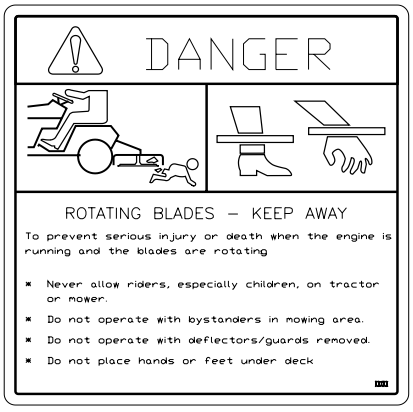


DANGER
THROWN OBJECT HAZARD
To prevent serious injury or death from thrown object:
• Operate only with all guards installed and in good condition.
• Stop operation if bystanders come within several hundred feet.
818-556C

818-556C
Danger! Thrown Object Hazard

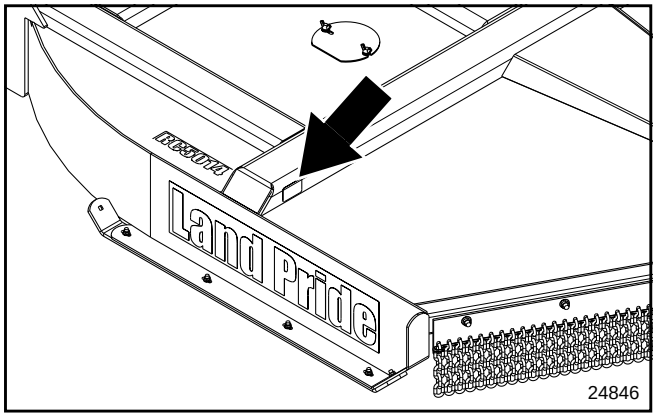
Located on Left Wing & Right Wing

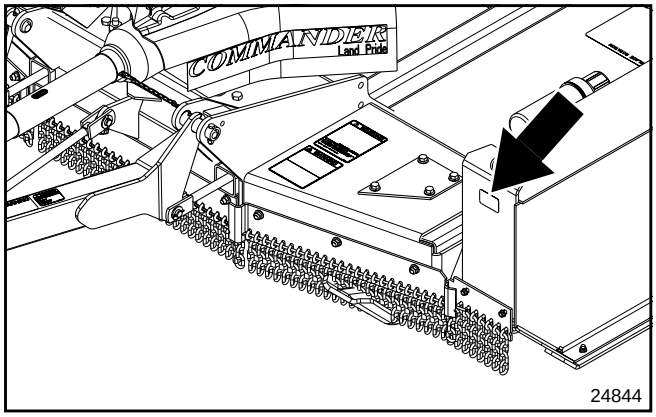



DANGER
ROTATING BLADES – KEEP AWAY
To prevent serious injury or death when the engine is running and the blades are rotating
* Never allow riders, especially children, on tractor or mower.
* Do not operate with bystanders in mowing area.
* Do not operate with deflectors/guards removed.
* Do not place hands or feet under deck

818-564C
Danger! Rotating Blade

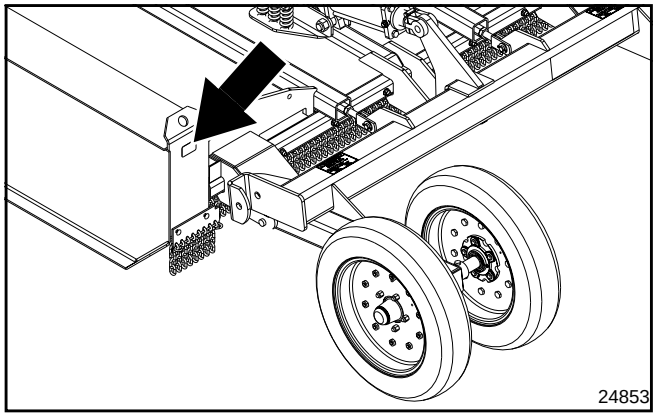
Located on Left Wing & Right Wing

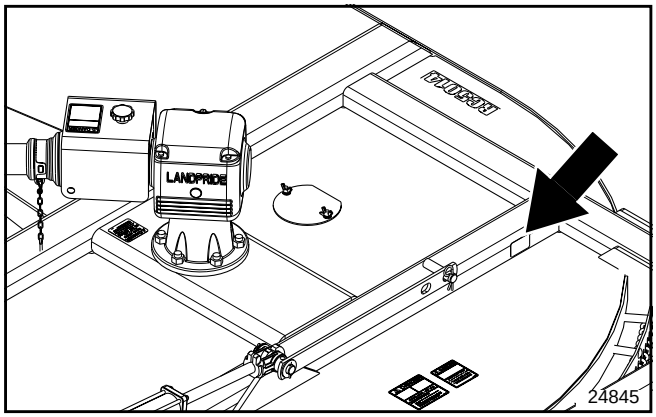




818-229C
Amber Reflector

Located on Left Wing & Right Wing





818-230C
Red Reflector

Located on Right Wing and Weight Box

Land Pride welcomes you to the growing family of new product owners.

This implement has been designed with care and built by skilled workers using quality materials. Proper assembly, maintenance, and safe operating practices will help you get years of satisfactory use from this machine.

The parts on your Rotary Cutter have been specially designed and should only be replaced with genuine Land Pride parts. Therefore, should your Rotary Cutter require replacement parts go to your Land Pride Dealer.

Application

The heavy duty RC5014 and RCM5014 Series Rotary Cutters are designed and built by Land Pride to provide excellent cutting performance on gently sloping or slightly contoured right of ways and roadsides. The 14' cutting width, 2" to 14" cutting height and ability to cut weeds and brush up to 3" in diameter make them well suited for these applications.

Both models offer pull-type self-leveling clevis hitches as standard equipment for attachment to 70-250 HP tractors. The RC5014 has a 540 rpm Cat. 5 driveline and the RCM5014 has a 1000 rpm Cat. 5 driveline.

Both models offer various, tire, rim and axle selections as well as various safety guard selections making them an excellent choice for state and municipal mowing applications. See "Features and Benefits" section 6 or "Product Specifications" section 5 for more information and performance enhancing options.

Using This Manual

- This Operator's Manual is designed to help familiarize you with safety, assembly, operation, adjustments, troubleshooting, and maintenance. Read this manual and follow the recommendations to help ensure safe and efficient operation.
- The information contained within this manual was current at the time of printing. Some parts may change slightly to assure you of the best performance.
- To order a new Operator's or Parts Manual contact your authorized dealer. Manuals can also be downloaded, free-of-charge from our website at www.landpride.com.

Terminology

"Right" or "Left" as used in this manual is determined by facing forward in the direction the machine will operate while in use unless otherwise stated.

Definitions

IMPORTANT: A special point of information related to its preceding topic. Land Pride's intention is that this information should be read and noted before continuing.

NOTE: A special point of information that the operator must be aware of before continuing.

Owner Assistance

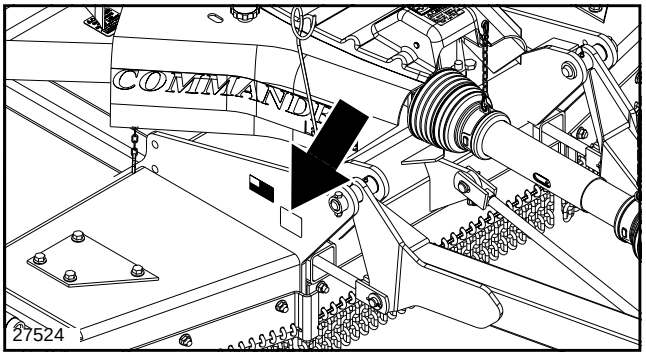
The Warranty Registration card should be filled out by the dealer at the time of purchase. This information is necessary to provide you with quality customer service.

If customer service or repair parts are required contact a Land Pride dealer. A dealer has trained personnel, repair parts and equipment needed to service the cutter.

The parts on your cutter have been specially designed and should only be replaced with genuine Land Pride parts. Therefore, should your cutter require replacement parts go to your Land Pride Dealer.

Serial Number Plate

Refer to the Figure 1 for the location of your serial number plate. For prompt service always use the serial number and model number when ordering parts from your Land Pride dealer. Be sure to include your serial and model numbers in correspondence also.



Serial Number Plate Location
Figure 1

Free Maintenance Video

Be sure to request your free copy of the **15' Rotary Cutter Maintenance Guidelines** (also applicable to 10', 14' & 20' cutters) video from your local Land Pride dealer.

Further Assistance

Your dealer wants you to be satisfied with your new machine. If for any reason you do not understand any part of this manual or are not satisfied with the service received, the following actions are suggested:

1. Discuss the matter with your dealership service manager making sure he is aware of any problems you may have and that he has had the opportunity to assist you.
2. If you are still not satisfied, seek out the owner or general manager of the dealership, explain the problem and request assistance.
3. For further assistance write to:

Land Pride Service Department
1525 East North Street
P.O. Box 5060
Salina, Ks. 67402-5060
E-mail address
lpservicedept@landpride.com

Tractor Requirements

Horsepower

Tractor horsepower should be within the range noted below. Tractors outside the horsepower range must not be used.

Horsepower Rating . . . . . .70-250 HP

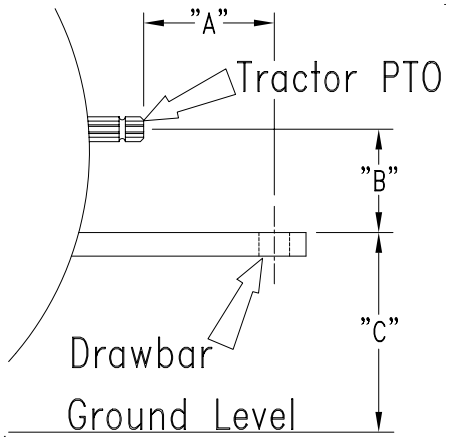
Hitch

Refer to Figure 1-1:

Maintain proper distance, dimension "A", between center of drawbar hitch pin hole and end of tractor PTO shaft.

Hitch Type . . . . . .Draw Bar
540 RPM Rear PTO Speed:
"A". . . . . 14"
"B". . . . . 8"
"C". . . . . 18" to 21"
1000 RPM Rear PTO Speed:
"A". . . . . 16"
"B". . . . . 8"
"C". . . . . 18" to 21"

IMPORTANT: PTO damage may occur if distance "A" is not properly maintained.



PTO to Drawbar Distance
Figure 1-1

Hydraulic Outlets

Two duplex outlets are required. One to raise and lower the cutter and one to raise and lower the wing.

If your tractor is not equipped with two duplex outlets, optional control valve kits are available from your local Land Pride dealer. See "Hydraulic Accessories" on page 23 for optional control valve kits.

PTO Speed

CAUTION

Do not over speed PTO. The cutter can be damaged when operated above its rated PTO RPM.

Rear PTO Speed:
Model RC5014 . . . . . .540 RPM
Model RCM5014 . . . . . .1000 RPM

IMPORTANT: Do not attempt to operate a 540 RPM driveline with a 1,000 RPM PTO tractor or a 1,000 RPM driveline with a 540 RPM PTO tractor. Many tractors provide both 540 and 1,000 RPM PTO modes. Check your tractor's manual to determine its capabilities.

Before You Start

Read and understand the operator's manual for your cutter. An understanding of how it works will aid in the assembly and set-up of your cutter.

It is best to go through the **Pre-Assembly Checklist** before assembling the cutter. Speed up your assembly task and make the job safer by having all the needed parts and equipment readily at hand.

Torque Requirements

Refer to "Torque Values Chart" on page 40 to determine correct torque values when tightening hardware.

Pre-Assembly Checklist

	Check	Reference
☐	Have a fork lift or loader with properly sized chains and safety stands capable of lifting and supporting the equipment on hand.	
☐	Have a minimum of two people available during assembly.	
☐	Make sure all major components and loose parts are shipped with the machine.	Operator's Manual
☐	Double check to make sure all parts, fasteners and pins are installed in the correct location. Refer to the Parts Manual if unsure. By double checking, you will lessen the chance of using a bolt incorrectly that may be needed later. **NOTE:** All assembled hardware from the factory has been installed in the correct location. Remember location of a part or fastener if removed during assembly. Keep parts separated.	Operator's Manual 330-323M Parts Manual 330-323P
☐	Make sure working parts move freely, bolts are tight & cotter pins are spread.	Operator's Manual
☐	Make sure all grease fittings are in place and lubricated.	Page 30
☐	Make sure all safety labels are correctly located and legible. Replace if damaged.	Page 4
☐	Make sure all red and amber reflectors are correctly located and visible when machine is in transport position.	Page 9
☐	Make sure all tires are inflated to the specified psi air pressure and all wheel bolts and axle nuts are tightened to the specified torque.	Page 40

Hitch Types

The cutter is factory supplied with a standard clevis hitch. The optional pintle hitch is also available. See your nearest Land Pride dealer should you want to change your hitch set-up.

Standard Clevis Hitch

Refer to Figure 1-2:

A level rod attached to the underside of the clevis keeps the clevis parallel with the tractor drawbar at all cutting heights. Cutter rotation about the tractor drawbar is limited to slots located in the clevis' upper and lower plates. Hitch should be secured to the tractor tongue with bolt, washers and nuts to prevent spreading of clevis.

Pintle Hitch (Optional)

Refer to Figure 1-3:

A pintle leveling rod attached to the underside of the pintle keeps the pintle parallel with the tractor drawbar at all cutting heights. Cutter rotation about the tractor drawbar is limited to movement about the pintle connection.

Hitch Assembly

Refer to Figure 1-4:

1. Install clevis rod (#1) to deck center lug using 3/4" x 1 1/2" clevis pin (#6), 3/4" flat washer (#4) and 5/32" x 1 1/4" cotter pin (#5).
2. Install left and right leveling rods (#2) to hitch frame (#3) with 3/4" x 1 1/2" clevis pins (#6), 3/4" flat washes (#4) and 5/32" x 1 1/4" cotter pins (#5). Final adjustment should be made when the cutter is attached to the tractor.
3. Install parking jack (#7) to hitch frame (#3) and secure with attached pin (#8). Adjust parking jack to preferred drawbar height.

Wing Axle Assembly

Refer to Figure 1-5:

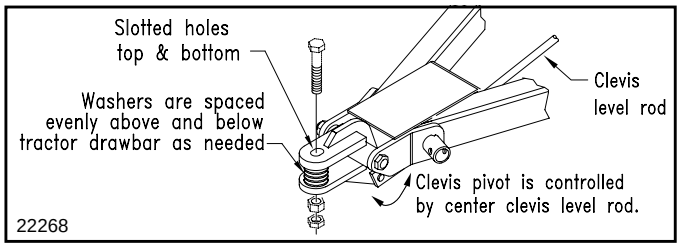
WARNING

Connect turnbuckle #4 between wing axle flanges before lowering wing. Otherwise, personal injury and/or damage to turnbuckle can occur.

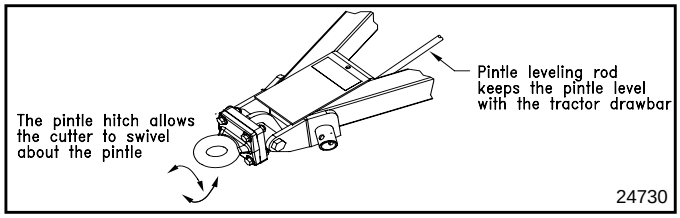
NOTE: Do not tighten hardware until wing axle assembly is complete.

Wing axles are secured folded backing for shipping purposes.

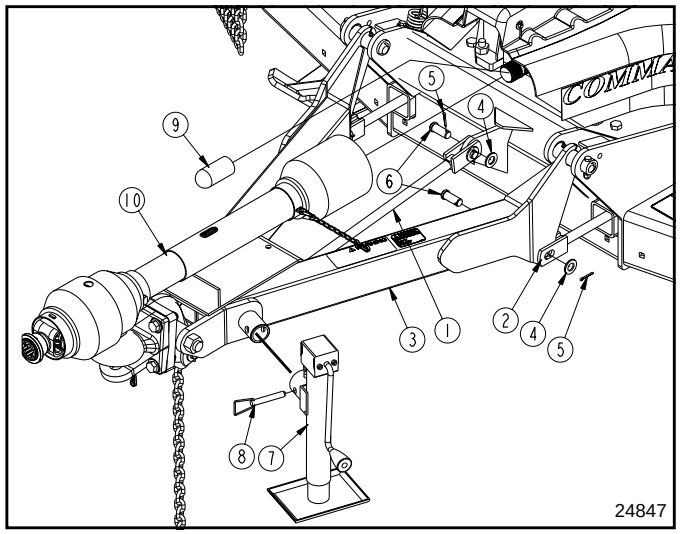
1. Remove ties securing left and right wing axles (#1) and rotate axles to install turnbuckles (#4).
2. Remove locknuts (#3) and cap screws (#2).
3. Attach left and right turnbuckles (#4) to wing axles with existing 1"-8 Gr8 cap screws (#2) and 1" lock nuts (#3). Make sure grease zerks are facing up when wings are folded down.
4. Tighten locknuts (#3) to the correct torque.


Slotted holes top & bottom
Washers are spaced evenly above and below tractor drawbar as needed
Clevis level rod
Clevis pivot is controlled by center clevis level rod.
22268

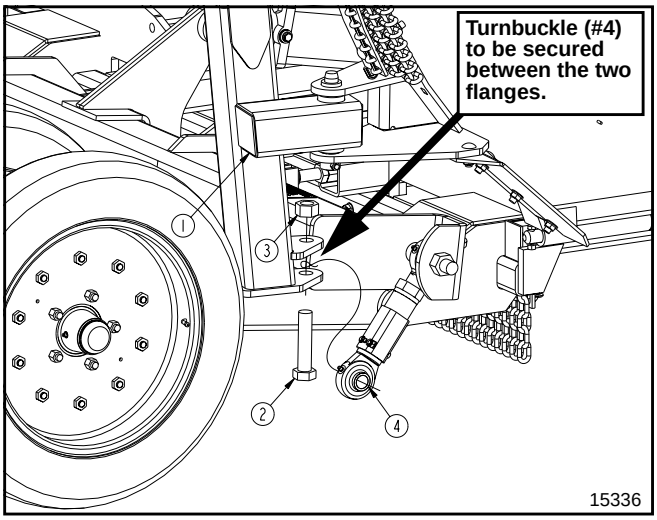
Standard Clevis Hitch
Figure 1-2


Pintle leveling rod keeps the pintle level with the tractor drawbar
The pintle hitch allows the cutter to swivel about the pintle
24730

Pintle Hitch
Figure 1-3



Hitch & Driveline Assembly
Figure 1-4



Wing Axle - Turnbuckle Assembly
Figure 1-5

Tractor Hook-up

DANGER

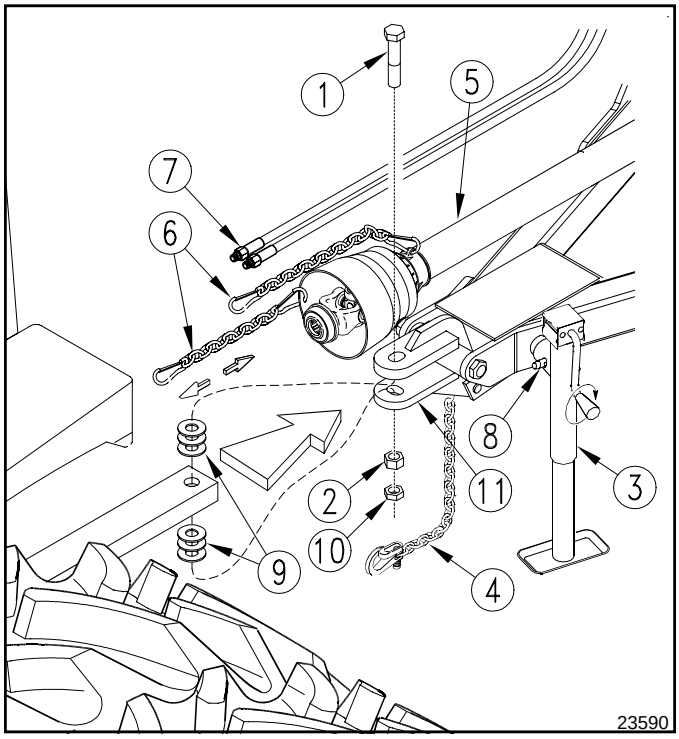
Crushing Hazard between tractor and implement. Do not allow anyone to stand between the tractor and implement while backing-up to an implement. Never operate the hydraulic 3-point lift controls while someone is directly behind the tractor.

Refer to Figure 1-6:

IMPORTANT: Jack pin (#8) must be fully inserted and secured to keep the parking jack from detaching from the hitch frame while working on or around a cutter that is not hitched to a tractor.

NOTE: Items 1, 2, 9 and 10 shown in Figure 1-6 are not furnished by Land Pride.

1. Make certain the parking jack (#3) is properly attached to the cutter hitch and secured with the attached Jack pin (#8).
2. Back tractor within close proximity of cutter clevis (#11).



Tractor Hookup to Standard Clevis Hitch
Figure 1-6

3. Raise or lower the parking jack (#3) to align clevis (#11) with the tractor drawbar. Drawbar should fit between lower and upper plates of clevis.
4. Back tractor up to cutter hitch until holes in the drawbar and clevis (#11) are aligned.
5. Insert 1" flat washers (#9) equally above and below tractor drawbar until both spaces between drawbar and clevis plates are filled.
6. Insert 1" x 5" GR5 hex bolt (#1) through top of clevis (#11), 1" washers (#9), drawbar, remaining 1" washers (#9) and out through bottom of clevis (#11). Secure hex bolt with nut (#2). Tighten nut snugly to remove all play and then back nut one-quarter turn. Tighten jamb nut (#10) against nut (#2).
7. Lower jack stand (#3) until hitch weight is supported by drawbar. Remove jack stand from hitch and store on weight box storage base. Prevent water and freeze damage by storing it so that the foot is level or lower than the head. See cover picture for correct position.
8. Attach hitch safety chain (#4) to the tractor. Adjust chain length to remove all slack except what is necessary to permit turning. Lock chain hook securely to the safety chain.

Driveline Installation

DANGER

***Do not** engage tractor PTO while hooking-up and unhooking the driveline or stand near a rotating driveline. A person's body and/or clothing can become entangled in the driveline resulting in serious injury or death.*

CAUTION

Always disengage PTO, engage parking brake, shut tractor engine off, remove switch key and wait for blades to come a complete stop before dismounting from tractor.

IMPORTANT: The driveline must be lubricated before putting it into service. Refer to "Lubrication Points" on page 30.

IMPORTANT: Do not attempt to operate a 540 RPM driveline at 1,000 RPM or a 1,000 RPM driveline at 540 RPM. Many tractors provide both 540 and 1,000 RPM PTO speeds. Check your tractor's manual to determine its capabilities.

IMPORTANT: Read and understand "Section 3: Operating Instructions" beginning on page 17 before operating the Rotary Cutter.

The main driveline may be either constant velocity type or conventional type. Pull-collar couplers and retaining bolts are used to connect the driveline to the tractor and implement gearbox.

A driveline that is too long can damage the tractor, gearbox and/or driveline. Always check driveline length with cutter hitched to the tractor before engaging the PTO.

Check Driveline Length

Refer to Figure 1-4 on page 12:

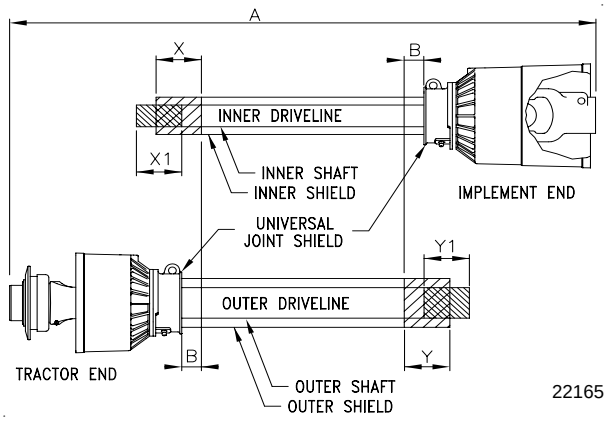
IMPORTANT: The Rotary Cutter must be hitched to the tractor with tractor and cutter aligned in a straight line on a level surface. This arrangement will provide the correct alignment between tractor PTO shaft and gearbox input shaft.

1. Park tractor and cutter in a straight line on a level surface. Place gear selector in park, shut tractor engine off, set park brake and remove switch key.
2. Remove protective shaft sleeve (#9) from input shaft of splitter gearbox.
3. Attach bolted coupler of driveline (#10) to divider gearbox shaft and pull-collar coupler to tractor PTO shaft. Skip to step 5 if driveline fits between tractor and implement.

Refer to Figure 1-7:

4. The PTO driveline will require shortening if it does not fit between tractor and cutter gearbox. Shorten driveline as follows:
   a. Pull driveline apart as shown in Figure 1-7.
   b. Attach pull-collar coupler to the tractor PTO shaft and bolted coupler to the divider gearbox shaft. Pull on each driveline section to be sure the universal joints are secured to the shafts.
   c. Hold driveline sections parallel to each other to determine if they are too long. The inner and outer shields on each section should end approximately 1" short of reaching the universal joint shield on the adjacent section (see **"B"** dimension). If they are too long, measure 1" (**"B"** dimension) back from universal joint shield and make a mark at this location on the inner and outer driveline shields.
   d. Cut off inner shield at the mark ("**X**" dimension). Cut the same amount off the inner shaft ("**X1**" dimension). Repeat cut off procedure ("**Y**" & "**Y1**" dimensions) to the outer driveline half.
   e. Remove all burrs and cuttings.
   f. Apply multi-purpose grease to the inside of the outer shaft and reassemble driveline.
   g. Attach inner driveline yoke end to the divider gearbox shaft.
   h. Attach outer driveline yoke end to the tractor's shaft.
5. The driveline should now be moved back and forth to insure both ends are secured to the tractor and cutter PTO shafts. Reattach any end that is loose.

IMPORTANT: Two or three small chains are supplied with each driveline. These chains must be attached to outer and inner driveline shields and to cutter and tractor to restrict driveline shields from rotating. If driveline has 3 chains, all 3 chains must be secured to keep driveline shields from rotating.



PTO Driveline Shortening
Figure 1-7

6. Refer to Figure 1-6 on page 13. Secure chains (#6) on driveline (#5) around hitch clevis rod to restrict driveline outer shield from rotating. Re-latch safety chain to driveline guard.
7. Attach safety chain located on the other end of the driveline (#5) to the cutter's main frame to restrict driveline inner shield from rotating. Re-latch safety chain to driveline guard.

Hydraulic Hook-up

The cutter is equipped with two hydraulic cylinders. The cylinder on the main deck lifts the cutter and the other cylinder folds the wing. Both cylinders are set-up for single action (one-way) operation.

Two duplex outlets are required at the tractor to operate the cylinders. One to raise and lower the cutter and one to fold the wing. Optional control valve kits are available if the tractor does not have two duplex outlets. See "Hydraulic Accessories" on page 23 for additional information.

⚠ DANGER

Hydraulic fluid under pressure can penetrate skin. Wear protective gloves and safety glasses or goggles when working with hydraulic systems. Use a piece of cardboard or wood rather than hands when searching for hydraulic leaks. If hydraulic fluid is injected into the skin, it must be treated by a doctor within a few hours or gangrene may result.

Refer to Figure 1-6 on page 13:

1. Route cylinder hoses (#7) through hose support loop and connect to tractor remote outlets.
2. Cycle hydraulic system by raising and lowering center deck cylinder and wing fold cylinder. It may be necessary to purge the hydraulic system of trapped air if operation is sluggish. The system may be purged as follows:

WARNING

Be sure center deck and wings are lowered to the ground and all hydraulic pressure is relieved before disconnecting any hydraulic lines or fittings between the Rotary Cutter and tractor hydraulic system.

a. With wings lowered to the ground and hydraulic pressure relieved, loosen hydraulic hose fitting at each wing cylinder slightly to allow fluid to escape.

b. Slowly activate tractor control valve to purge any trapped air from the system.

c. Tighten each fitting.

3. The center deck lift cylinder is purged in the same manner as the wing cylinders. The cutter must be resting on the ground and all hydraulic pressure relieved before loosening hose fitting as described in 2a above.

4. Check driveline for adequate clearance under all ranges of cutter height. With driveline shaft attached to the tractor, slowly raise and lower the cutter to its upper and lower limits while observing clearances between hitch and driveline. Adjust tractor drawbar height and/or length if driveline interferes. See Figure 1-1 on page 11 for correct drawbar dimensions.

Unhooking From the Cutter

1. Park cutter on a level solid hard surface. Place tractor gear selector in park and set park brake.

Refer to Figure 3-2 on page 18:

2. Raise wing up in the transport position and place transport lock bar in the locked position. Make sure transport bar is secured in place with lock pin (#2) and hair pin (#1).

Refer to Figure 2-2 on page 16:

3. Remove stroke control spacers from the center hydraulic cylinder and lower cutter until front skids are resting on the ground. Replace stroke control spacers as needed to support wheels at this position.

4. With tractor gear selector in park and park brake set, shut tractor engine off, and remove switch key. Move cylinder lift levers back and forth to release hydraulic line pressure.

Refer to Figure 1-6 on page 13:

5. Remove jack stand (#3) from the weight box and attach to cutter hitch. Secure jack stand in place with attached jack pin (#8).

6. Unhook hydraulic hoses (#7), driveline safety chains (#6), driveline (#5) and hitch safety chain (#4) from the tractor. Store hose ends in hose support loop.

7. Adjust jack stand up or down as need to remove hitch pin (#1).

8. Drive tractor away from the cutter and then lower jack stand to rest cutter on its front skid shoes.

Center and Wing Section Leveling

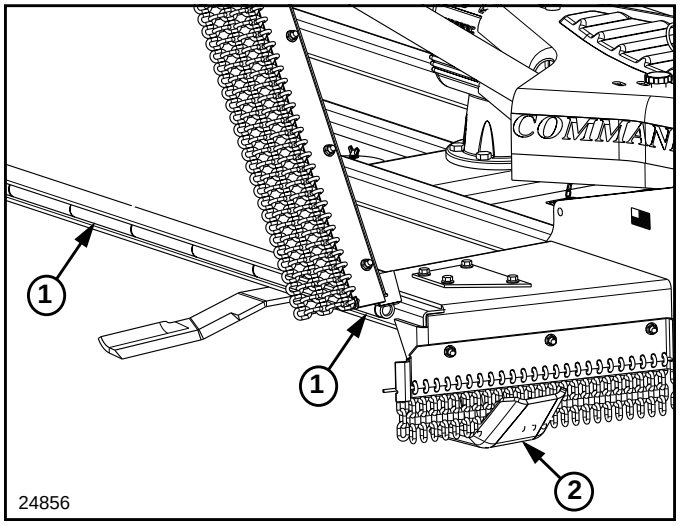
These adjustments should be made with your cutter hooked up to the same tractor that will be used for field operations or one having the same drawbar height. Adjust leveling rods as described below.

Refer to Figure 2-1 & Figure 2-2:

1. Attach cutter to tractor and position it on level ground.
2. Raise wing to locked position.
3. Using hydraulic lift, adjust center deck height so that the front skids (#2) are 2 to 3 inches above ground.

NOTE: Lengthening leveling rods with adjusting nuts (#4) will lower the front of the cutter.

4. Measure right and left hand sides of the center section from ground line to center line of hinge rods (#1). The hinge rods should be 1" closer to the ground at the front than they are at the back. If they are not, loosen both jam nuts (#3) and rotate adjusting nuts (#4) at the same time until the right and left hand sides are inclined from front to back by 1".
5. Be sure that both sides are equal distance from ground line to center line of hinge rod and that left and right leveling rods have equal tension. Re-tighten jam nut (#3).
6. Lower wing to ground position. Wing section will need adjusting if wing top deck sheet is not level with center top deck sheet. Level wing by loosening jam nut (#5) and rotating adjusting turnbuckle (#6) until right wing is level with center section. Re-tighten jam nut (#5).

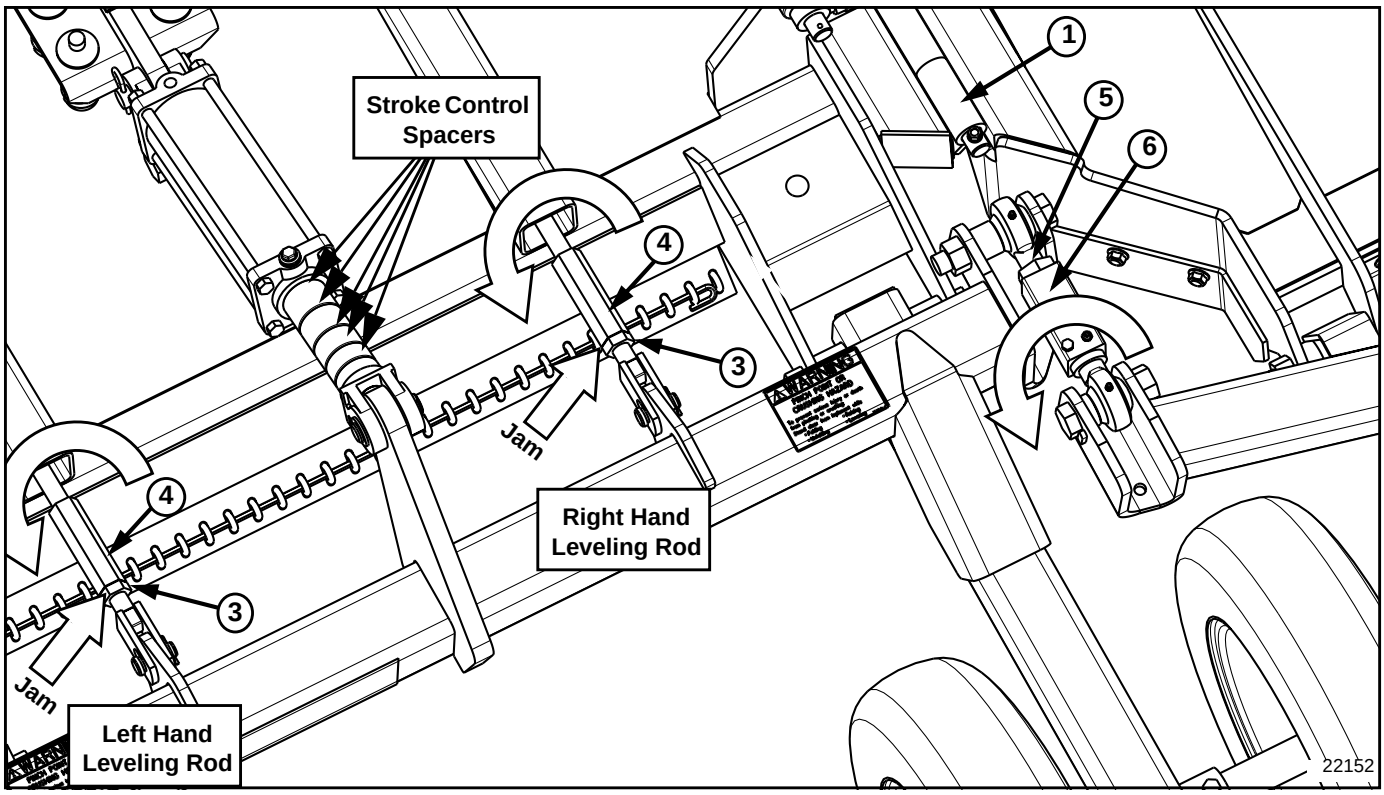


Front Skid Position
Figure 2-1

Cutting Height Adjustment

Refer to Figure 2-2:

Stroke control spacers are supplied to accommodate various cutting heights. Remove and add control spacers to the cylinder rod by spreading them apart at the break line.



Center Section Leveling Rod
Figure 2-2

Pre-Start Checklist

Hazard control and accident prevention are dependent upon the awareness, concern, prudence and proper training involved in the operation, transport, maintenance and storage of the Rotary Cutter. Therefore, it is absolutely essential that no one operates the cutter without first having read, fully understood and become totally familiar with the Operator's Manual. Make sure the operator has completed the Operating Checklist below.

Operating Checklist

✔	Check	Page No.
	Read and follow all Safety Rules & Safety Decals carefully. Refer to "Important Safety Information".	Page 1
	Make sure all guards and shields are in place. Refer to "Important Safety Information".	Page 1
	Read and follow Hook-up & preparation instructions. Refer to "Section 1: Assembly and Set-up".	Page 11
	Read and make all required adjustments. Refer to "Section 2: Adjustments".	Page 16
	Read and follow all operating procedures. Refer to "Section 3: Operating Instructions".	Page 17
	Read and follow all Maintenance Instructions. Refer to "Section 5: Maintenance & Lubrication".	Page 24
	Read and follow all Lubrication Instructions. Refer to "Lubrication Points".	Page 30
	Make sure all gearboxes are properly lubricated. Refer to Gearbox lubrication.	Page 31
	Check cutter initially and periodically for loose bolts and pins. Refer to "Torque Values Chart".	Page 40

Inspection Procedures

DANGER

Do not *engage tractor PTO while hooking-up and unhooking the driveline or stand near a rotating driveline. A person's body and/or clothing can become entangled in the driveline resulting in serious injury or death.*

CAUTION

Always disengage PTO, engage parking brake, shut tractor engine off, remove switch key and wait for blades to come a complete stop before dismounting from tractor.

1. Make sure tractor PTO is disengaged and cutter blades have come to a complete stop.
2. Park tractor and cutter on a level surface.
3. Raise and lock wings in the folded-up position with transport locks. See "Transport Locks" on page 18.
4. Raise center deck fully up and place sturdy support blocks or jack stands under the four deck corners. Lower center deck down onto the supports.
5. Place tractor gear selector in park, shut tractor engine off, remove switch key and dismount from tractor.
6. Check cutting blades for sharpness. Refer to "Tractor Maintenance" on page 24.
7. Inspect tractor safety equipment to make sure it is in good working condition.
8. After completing inspection and making any necessary repairs, remove supports from under the deck and wing transport locks. Lower wings level with center deck and then lower Rotary Cutter down to about 2" off the ground.

The remaining inspections are made by engaging the PTO to check for normal operation.

CAUTION

Tractor PTO shield and all Rotary Cutter guards must be in place at all times during operation!

IMPORTANT: Stop PTO immediately if vibration continues after a few revolutions during start-up and anytime it occurs thereafter. Wait for PTO to come to a complete stop before dismounting from tractor to check for probable causes. Make necessary repairs and adjustments before continuing on.

IMPORTANT: Do not exceed the cutter's rated PTO speed. Excessive engine speed will damage the power train components.

9. Start tractor, set throttle to idle or slightly above idle and slowly engage PTO. Initial start-up vibration is normal and should stop after a few revolutions. Stop PTO rotation immediately if vibration continues.
10. Once cutter is running smoothly, increase tractor PTO speed to the appropriate rpm. Stop PTO rotation immediately if vibration occurs.
11. Investigate the cause of vibration if it does occur. Make sure cutter blades are not locked against each other. See "Field Set-up" on page 19.

Transport Locks

IMPORTANT: Always disengage tractor's PTO and wait for blades to stop before raising cutter wings to transport position. Drivelines and gearboxes will be damaged if cutter wings are raised while PTO is turning.

NOTE: The wing is controlled with a hydraulic lift cylinder. Be certain that the wing hydraulics are attached to the tractor and the hydraulic hoses are full of oil before proceeding.

The cutter wing will need to be raised before transporting on a roadway, through narrow gate openings and when servicing the deck underside.

Refer to Figure 3-1 & Figure 3-2:

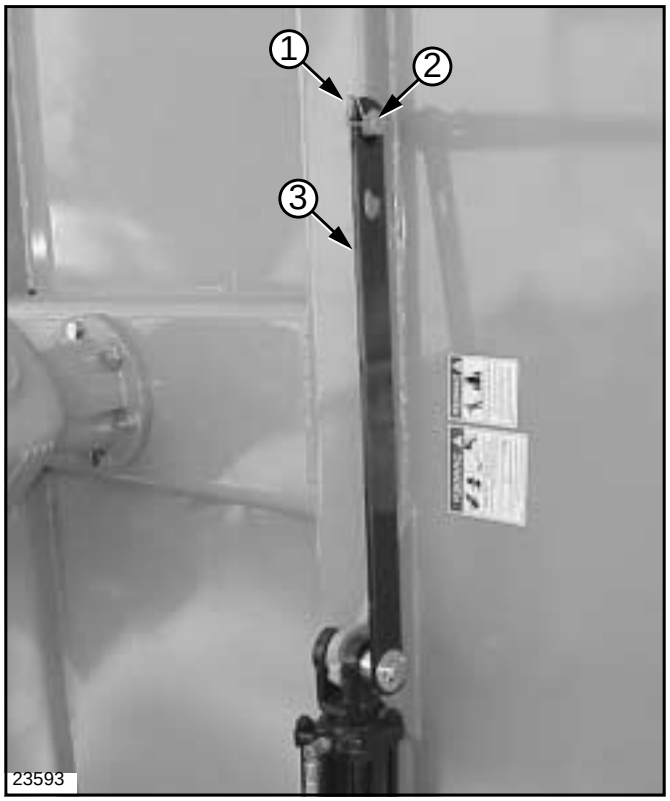
1. **Disengage tractor PTO** and wait for cutter blades to come to a complete stop before raising cutter wing.
2. Raise cutter wing fully up with hydraulics.
3. Place tractor gear selector in park, shut tractor engine off, remove switch key and dismount from tractor.

See Figure 3-1:

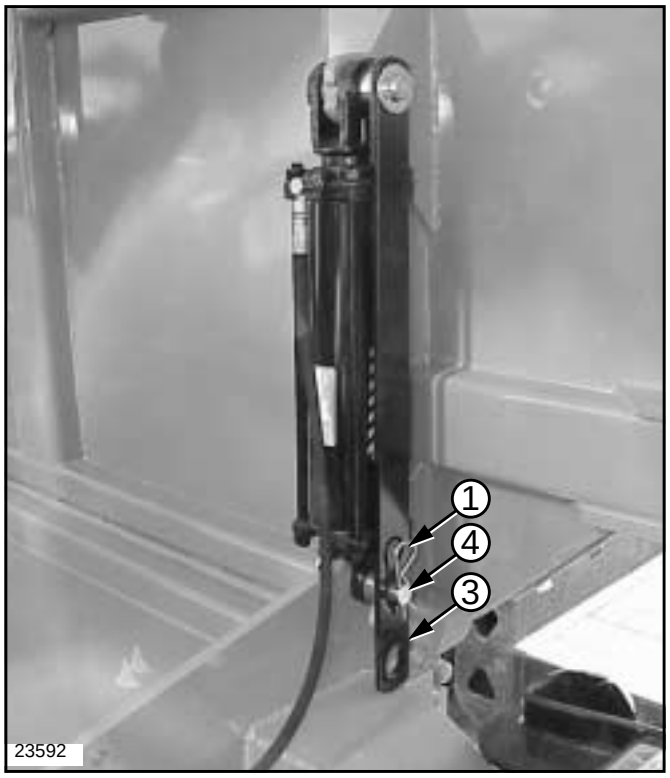
4. Remove hairpin clip (#1) from storage pin (#2). Remove transport lock bar (#3) from storage position.

See Figure 3-2:

5. Swing transport lock bar (#3) to locked position and place over lock pin (#4). Secure with hairpin clip (#1).



Transport Bar, Storage Position
Figure 3-1



Transport Bar, Locked Position
Figure 3-2

Transporting

⚠ CAUTION

When traveling on public roads at night or during the day, use accessory lights and devices for adequate warning to operators of other vehicles. Comply with all federal, state and local laws.

1. Select a safe ground speed when transporting from one area to another.
2. Be sure to reduce tractor ground speed when turning and leave enough clearance so the cutter does not contact obstacles such as buildings, trees or fences.
3. Always raise the wing and set the transport lock to keep wing decks from falling before traveling on public roadways.
4. When traveling on roadways, transport in such a way that faster moving vehicles may pass you safely.
5. Shift tractor to a lower gear when traveling over rough or hilly terrain.

Field Set-up

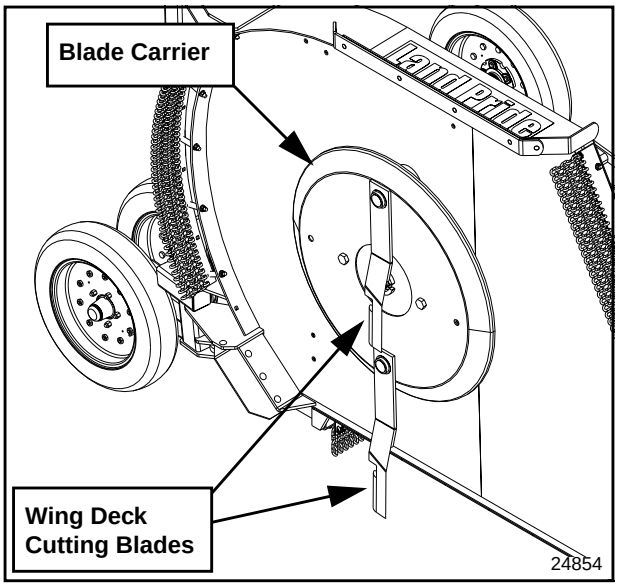
WARNING

The following operational procedures should be carried out by the tractor operator. Other persons should be cleared of the area even during cutter set-up. All cutter operation including field set-up should be stopped when in the vicinity of other persons.

Refer to Figure 3-3:

1. Inspect wing blade carrier and cutting blades prior to lowering the wing and powering the cutter.

NOTE: The cutting blades may become locked together (overlapped) when the wing is raised to transport position. Operating the cutter under such circumstances will result in severe deck vibration. Inspect wing deck for a locked blade condition prior to power-on operation. Use a pry bar or other tool to separate cutting blades when necessary.



Wing Deck Blade Positioning
Figure 3-3

NOTE: Cutter height is controlled with a hydraulic lift cylinder.

Refer to Figure 3-1 & Figure 3-2 on page 18:

2. See Figure 3-2 on page 18. Fully raise the wing to release any tension on the transport lock bar. Remove hairpin clip (#1) from transport lock pin (#4).
3. See Figure 3-1 on page 18. Swing transport lock bar (#3) to stored position and over lock pin (#2). Secure with hairpin clip (#1).
4. Lower wing section to down position.
5. Extend hydraulic lift cylinder to release any pressure against the stroke control spacers. Remove stroke control spacers. Keep spacers with tractor for field installation.
6. Increase throttle to approximately 1/4 engine speed and slowly engage driveline. Also see note below.

NOTE: Use tractor's PTO soft start option if available.

7. Ensure that all power shafts are rotating and that the cutter has no vibration.
8. Continue to increase throttle to full 540 or 1000 PTO speed before commencing forward operation.
9. While cutting, use the lever for the hydraulic lift cylinder to set the cutter to correct cutting height.
10. Once cutting height has been set, stop traveling, disengage driveline, shut tractor engine off and remove switch key. Do not change lift cylinder stroke length.
11. Install stroke control spacers onto the lift cylinder rod until the rod is filled between the cylinder and clevis. Always install the largest spacers first and the smaller ones last. If necessary, raise cutter slightly to install the last spacer.
12. Return to the tractor and bring cutter up to full rpm as outlined in steps 6, 7 & 8 before continuing cutting operation.

Operating Speed

Refer to Figure 3-4 & Figure 3-5:

Optimum ground speed depends on density of material being cut, horsepower rating of tractor, and (in some cases) terrain. Always operate tractor at cutter's full rated PTO speed in a gear range that allows the cutter to make a smooth cut without lugging the tractor down, usually between 2 to 5 mph. Low of PTO speed will allow the blades to hinge back and result in ragged, uneven cutting.

Wing Operating Angle

Use the float position of your tractor's hydraulic system to provide automatic floating of the wings for varying terrain conditions. This will ensure that the wing gauge wheels are in continuous contact with the ground at all times.

IMPORTANT: Do not operate this cutter under any terrain conditions where, on a continuous cut, the wing angle exceeds 45 degrees up. Damage to the wing driveline and gearboxes can occur.

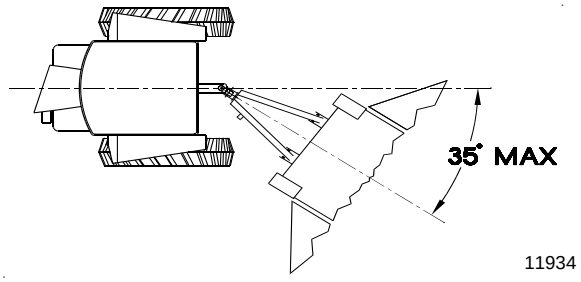
IMPORTANT: During operation, the wing lift lever(s) must be in the float position to avoid damage to the cylinders and axles.

Driveline Turning Angle

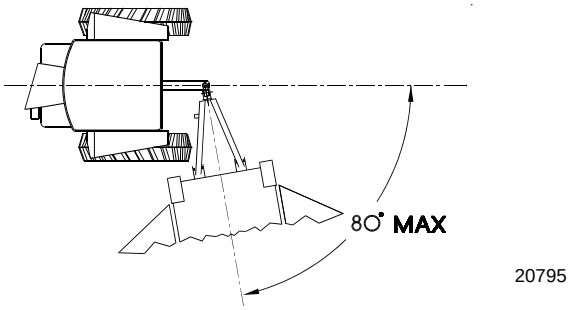
Refer to Figure 3-4 & Figure 3-5:

Plan your field cutting to minimize number of turns, especially extreme turning angles. Avoid tractor-to-cutter turning angles that exceeds the driveline's maximum turning angle. If the turn cannot be avoided, disengage tractor PTO and wait for the driveline to stop rotating before making the turn.

- **Standard Conventional driveline:** Maximum turning angle = 35°.
- **Constant velocity driveline:** Maximum turning angle = 80°.



Conventional U-Joint Driveline
Figure 3-4



Constant Velocity (CV) Driveline
Figure 3-5

General Operating Instructions

DANGER

Do not operate 14 ft. cutters without wing attached to the center deck. Removing the wing will expose blades and increase risk of cutter overturning. Exposed blades can result in serious injury and/or death.

DANGER

Do not lift deck to use cutting blades as a fan. Cutting blades are not properly designed or guarded for this use. Using the deck as a fan can result in injury and/or death.

DANGER

Damaged drivelines can brake apart while rotating at high speeds causing serious injury or death. Always remove Rotary Cutter from service until damaged drivelines are repaired or replaced.

DANGER

***Do not** engage tractor PTO while hooking-up and unhooking the driveline or while someone is standing near a rotating driveline. A person's body and/or clothing can become entangled in the driveline resulting in serious injury or death.*

DANGER

Rotary cutters have the ability to discharge objects at high speeds. To prevent personal injury caused by thrown objects, the use of front & rear safety guards is strongly recommended!

WARNING

Tractor PTO shield, all Rotary Cutter gearbox shields and driveline shields must be in place and secured while the cutter is operating to avoid injury or death from entanglement in rotating drivelines!

WARNING

Refer to Figure 5-3 on page 25. Keep all objects out of blade bolt access hole "A" except when servicing cutter blades (#3). Make sure the main driveline is disconnected from the tractor before servicing cutter blades.

CAUTION

Do not exceed the rated cutting capacity of the cutter! See Specifications and Capacities on page 35 for cutting capacity of your specific unit. Using this cutter for any other type of work can damage the drive components, cutter blades and deck components!

CAUTION

Always disengage PTO, engage parking brake, shut tractor engine off, remove switch key and wait for blades to come a complete stop before dismounting from tractor.

CAUTION

Do not over speed PTO or machine damage may result. Many tractors provide both 540 and 1,000 RPM PTO speeds. Check your tractor's manual to determine its capabilities.

- *RC series cutters are designed for a tractor with 540 RPM rear PTO.*
- *RCM series cutters are designed for a tractor with 1000 RPM rear PTO.*

IMPORTANT: Avoid catching hydraulic hoses on brush, post, stumps, and other protrusions that could damage and/or break them.

NOTE: Your Rotary Cutter is equipped with free swinging cutting blades to reduce shock loads when striking obstacles. However, it is best to avoid striking obstacles to extend cutter life and life of cutting blades.

IMPORTANT: It is important to maintain correct PTO speed. Loss of PTO speed will allow blades to hinge back and result in ragged, uneven cutting.

Be sure to read entire manual before proceeding with these operating instructions.

Now that you have familiarized yourself with the Operator's Manual, completed the Operator's Checklist, properly attached your Cutter to your tractor, made the right leveling adjustments, and preset your cutting height, you're almost ready to begin using your Land Pride 14" Flex-Wing Rotary Cutter.

It's now time to do a running operational safety check. If at any time during this safety check you detect a malfunction in either the cutter or tractor shut the tractor off immediately, remove the key, and make necessary repairs or adjustments before continuing on.

Make sure the tractor's park brake is engaged, the tractor's PTO is disengaged, the wing is down and the cutter is resting on the ground. Start the tractor and then back the tractor throttle off till the engine is at low idle. With the tractor's rear hydraulic lift control lever, raise the cutter to transport position making sure that the PTO shaft is not in a bind and does not come in contact with the cutter frame. With the tractor still at low idle, engage the PTO. If everything is running smoothly at this point increase the engine rpm until the tractors engine reaches full PTO operating speed which will be either 540 or 1000 rpm. Slowly lower the cutter to make sure the driveline does not bind or chatter. Then return the engine to low idle and disengage the PTO.

Raise the cutter up until it is at the preferred cutting height. This height is the distance from the blade's cutting edge to the ground. Add stroke control spacers to the hydraulic cylinder rod starting with the thicker spacers first and working down to the thinner ones last. When adding the last spacer, select one that will fill the remaining space on the cylinder rod, raise the cutter up to open this space up and then install the spacer. The cutter can now be raised and lowered consistently to the same cutting and transport height.

Make slow tight turns to the right and to then the left to ensure that the rear tractor tires do not contact the deck or hitch.

You should now be ready to move to the cutting site to begin mowing. You should have inspected and should only be cutting in an area you are familiar with which is relatively free of debris and unseen objects. Never assume an area is clear and extremely tall grass should be cut twice to detect potential hazards. In the event you do strike an object, stop the tractor and cutter immediately to inspect the cutter and make any necessary repairs before resuming operation. It pays to inspect a new area and to develop a plan before you cut.

Normal mowing speed will be between 2-5 mph and you will need to maintain full tractor engine PTO speed to produce a clean cut so make a tractor gear and range selection that will maintain this combination. Generally the quality of cut will be better at lower ground speeds and cutting denser ground cover may create the need to slow down. You will want to avoid very low cutting heights especially on extremely uneven terrain. Always cut downward on slopes and avoid crossing the face of steep slopes. Avoid sharp drops and cross diagonally through dips to prevent hanging up the tractor and cutter. Slow down in turns and avoid sharp turns if at all possible. Remember to look back often.

Now you're prepared and well briefed so lets begin cutting.

- Reduce the tractor's engine rpm.
- Make sure the wings of the cutter are on the ground and in cutting position.
- Engage the PTO, raise the engine rpm to the appropriate PTO speed.
- Begin mowing.

Operators of models with conventional main driveline must plan ahead and choose a cutting pattern that allows for wider turns. Try increasing or decreasing ground speed to determine the effect on quality of cut. With a little practice you will be pleased with what you and your Land Pride 14" Flex-Wing Rotary Cutter can do.

When you are done mowing, need to take a break, or just need to make a few adjustments to the cutter, remember to always do the following.

- Reduce the tractor's engine rpm.
- Disengage the PTO.
- Stop on level ground.
- Set park brake.
- Turn off the engine, and remove the key.

Safety Guard Options

DANGER

Rotary Cutters have the ability to discharge objects at high speeds; therefore, the use of front and rear safety guards is strongly recommended when cutting along highways and in areas where people may be present.

IMPORTANT: Not all objects will be stopped by the safety shields. Therefore, Land Pride recommends using extreme caution when cutting in public areas. It is best to operate the Rotary Cutter when no one is within 300 feet of the cutter.

Land Pride offers three types of safety guards to best suit your application: rubber skirt guards, single row chainguards and double row chainguards.

- Rubber skirt guards are designed for light duty applications.
- Single row chainguards are constructed with a single row of hanging chain links. They can withstand harsher applications than rubber skirts.
- Double row chainguards are constructed with two staggered rows of hanging chain links. The second row provides an additional barrier for stopping thrown objects.

Part Number & Description

Rubber Guards

318-817A	Front Rubber Safety Guards
318-824A	Rear Rubber Safety Guards

Single Chain Guards

318-816A	Front Single Row Chainguards
318-823A	Rear Single Row Chainguards

Double Chain Guards

318-818A	Front Double Row Chainguards
318-825A	Rear Double Row Chainguards

Wheel Options

Land Pride offers four wheel options to best suit your application:

- 6" x 21" Laminated Tires are constructed of laminated layers of solid rubber that will never go flat.
- 24" x 7.75" x 15" Used Aircraft Tires without foam filling are built tough to withstand the rugged use a cutter receives and to provide a smoother ride when transporting from field to field.
- 24" x 7.75" x 15" Used Aircraft Tires with foam filling have the same features as the Aircraft Tires without foam except the foam filled tires won't go flat.
- 15" Rims can be supplied with your cutter should you prefer to provide your own tires.

Part Number & Description

814-265C	6" x 21" Laminated Tire
814-286C	27" x 7.75" x 15" Used Aircraft Tire without foam filling
814-287C	27" x 7.75" x 15" Used Aircraft Tire with foam filling
814-284C	15" Rim

Driveline Options

Land Pride offers two input driveline options. Connecting drivelines are not optional. See your nearest Land Pride dealer should you desire to change one or more drivelines on your cutter.

Input driveline Options

- Cat. 5 Standard conventional driveline capable or turning angles up to 35 degrees while operating.
- Cat. 5 Constant velocity driveline capable of turning angles up to 80 degrees while operating.

Connecting driveline

- Cat 5 driveline with Slip Clutch Protection

Part Number & Description

Input driveline Options (540 RPM)

318-038S	CAT. 5 Constant velocity driveline 1 3/8-6
318-039S	CAT. 5 Standard driveline 1 3/8-6

Input driveline Options (1000 RPM)

318-042S	CAT. 5 Standard driveline 1 3/8-21
318-041S	CAT. 5 Constant velocity driveline 1 3/8-21
318-144S	CAT. 5 Constant velocity driveline 1 3/4-20

Connecting drivelines (540 & 1000 RPM)

318-422V	Cat. 5 Intermediate driveline w/slip clutch 540/1000 RPM
318-420S	Cat. 5 Wing driveline w/slip clutch 540/1000 RPM

Hydraulic Accessories

Independently Controlled Deck Wings

Land Pride offers a kit for raising the deck wings independently to clear small obstacles in the field without maneuvering around them. Your tractor will require three duplex outlets to raise the wings independently. If needed, you can add duplex outlets to your tractor by purchasing Land Pride's 3 Spool Control Valve Kit or their Selector Control Valve Kit. See "Duplex outlets" below if additional outlets are required.

IMPORTANT: Never operate this cutter under any terrain conditions where, on a continuous cut, the wing angle exceeds 45 degrees up. Damage to the wing driveline and gearboxes can occur. Raise wing only to clear obstacles and then lower the wing immediately after clearing the obstacles.

Follow all safety precautions in this manual especially information regarding raising the wings up with PTO running.

Part Number & Description

318-316A	Hydraulic Wing Control Kit

Duplex outlets

Some tractors do not have enough duplex outlets to handle the equipment connected to the tractor. Land Pride offers the following kits to add duplex outlets to your tractor.

3 Spool Control Valve Kit: This kit is for tractors with a single duplex outlet. It converts the single duplex outlet into three duplex outlets with three hydraulic controlled levers.

Selector Control Valve Kit: This kit is for tractors needing only one additional duplex outlet. It converts one of the tractor's duplex outlets into two duplex outlets with a control valve. A selector switch on the control valve selects which of the two duplex outlets is operational with the tractor hydraulic control lever.

See your local Land Pride dealer if your tractor is not properly equipped with the correct number of duplex outlets.

Part Number & Description

312-315A	3 Spool Control Valve Kit
312-316A	Selector Control Valve Kit

Hitch Options

Refer to "Hitch Types" on page 12

The cutter is factory supplied with the standard clevis hitch. Also available is the Pintle Hitch. See "Hitch Types" on page 12 for complete description of hitches.

Part Number & Description

330-336A	Standard Clevis Hitch
330-337A	Pintle Hitch (Optional)

General Maintenance Information

Proper servicing and adjustment is the key to the long life of any implement. With careful inspection and routine maintenance, you can avoid costly down time and repair.

Check all bolts after using the unit for several hours to be sure they are tight. Replace any worn, damaged or illegible safety labels by obtaining new labels from your Land Pride Dealer.

Tractor Maintenance

One of the most important things you can do to prevent hydraulic system problems is ensure that your tractor's reservoir remains free of dirt and contamination.

Use a clean cloth to wipe hose ends before attaching them to your tractor. Replace your tractor's hydraulic filter element at the prescribed intervals. These simple maintenances will go a long way to prevent occurrence of control valve and hydraulic cylinder problems.

Cutter Blade Maintenance

DANGER

Always disconnect main driveline from tractor PTO before servicing the underside of the cutter deck. Cutter can be engaged if tractor is started resulting in damage to the cutter, bodily injury and/or death.

WARNING

Always secure cutter deck in the up position with solid supports before servicing the underside of the cutter. Never work under equipment supported by hydraulics. Hydraulics can drop equipment if controls are actuated or if hydraulic lines burst. Either situation can drop the cutter instantly even when power to the hydraulics is shut off.

WARNING

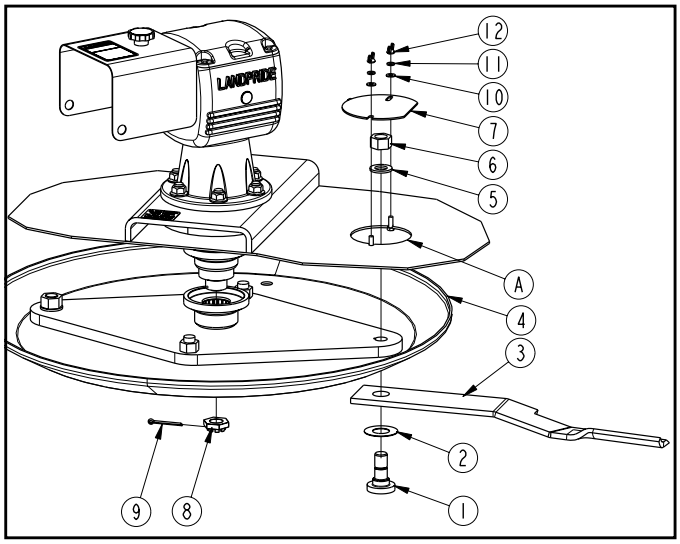
Refer to Figure 5-1. Keep blade bolt access hole "A" covered at all times except when servicing cutter blades (#3). Make sure the main driveline is disconnected from the tractor before removing access cover (#7).

IMPORTANT: Replace cutting blades with genuine Land Pride blades only. Blades must be replaced in mating pairs. Not replacing both blades will result in an out-of-balance condition that will contribute to premature bearing breakdown on the spindle hub and create structural cracks in cutter housing.

Always inspect cutting blades before each use. Make certain they are properly installed and are in good working condition. Replace any blade that is damaged, worn, bent, or excessively nicked. Never try to straighten a bent blade! Small nicks can be ground out when sharpening.

Remove cutting blades and sharpen or replace as follows:

1. Place tractor gear selector in park and/or set brakes, shut engine off and remove ignition key.
2. Disconnect main driveline from tractor PTO and secure cutter deck in the up position with solid supports before servicing underside of cutter.

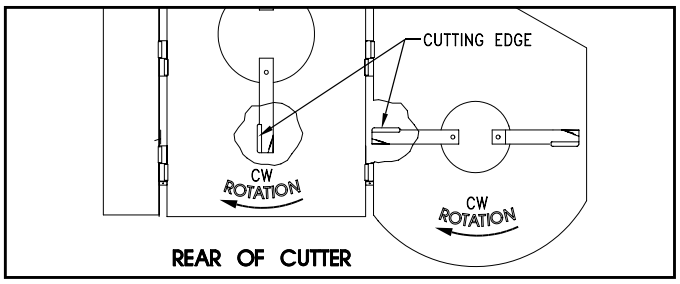


Cutter Blade Assembly
Figure 5-1

Refer to Figure 5-1:

3. Remove wing nuts (#12), lock washers (#11), flat washer (#10)and access cover (#7). Rotate blade bolt (#1) until in alignment with access hole (A).
4. Unscrew locknut (#6) to remove cutting blade (#3). Blade bolt (#1) is keyed and will not turn freely.
5. Both blades should be sharpened at the same angle as the original cutting edge and must be replaced or re-ground at the same time to maintain proper balance in the cutting unit. The following precautions should be taken when sharpening blades:
   a. Do not remove more material than necessary.
   b. Do not heat and pound out a cutting edge.
   c. Do not grind blades to a razor edge. Leave a blunt cutting edge approximately 1/16" thick.
   d. Always grind cutting edge so end of blade remains square to cutting edge and not rounded.
   e. Do not sharpen back side of blade.
   f. Both blades should weigh the same with not more than 1 1/2 oz. difference. Unbalanced blades will cause excessive vibration which can damage gearbox bearings and create structural cracks.

6. Refer to Figure 5-2: Carefully check cutting edges of blades in relation to blade carrier rotation to ensure correct blade placement. Cutter blades must be installed with cutting edge leading in rotation**.** Airfoil (lift) must be oriented towards the top of the deck.



Blade Rotation
Figure 5-2

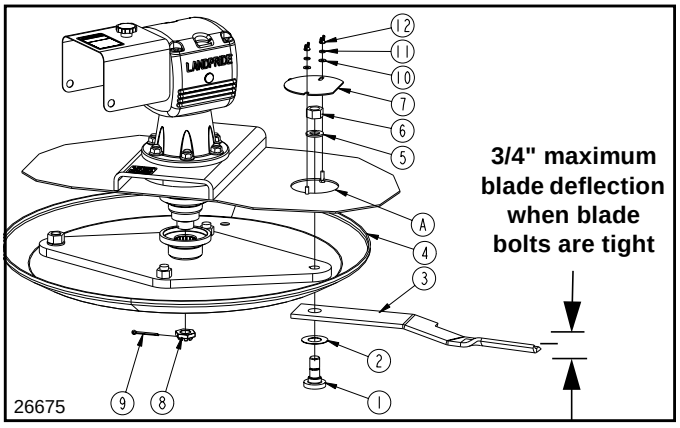
Refer to Figure 5-3:

IMPORTANT: Examine blade bolts (#1) and washers (#5) for excessive wear and replace if worn.

IMPORTANT: Shim (#2) may or may not be required. If blade deflection is less than 3/4" without a shim, then the shim is not used. However, a shim is required if blade deflection is greater than 3/4".

IMPORTANT: Locknuts can loose their ability to lock properly once removed. Therefore, always use a used blade nut or plain nut in steps 7 & 8 and then **replace used nut with new locknut in step 9.**

7. Start by assembling blades without shim (#2). Insert blade bolt (#1) through blade (#3), dish pan (#4) and flat washer (#5). Temporarily secure blade with a used 1 1/8"-12 nut. **Draw nut up snug. Do not tighten.**



Cutter Blade Assembly
Figure 5-3

8. Check blade deflection. If deflection is greater than 3/4", remove blade bolt and reassemble as before except include shim (#2) when reassembling. Select shim thickness based on deflection. The greater the deflection, the thicker the shim.
9. Once blade deflection is correct, **replace used nut with new locknut (#6)** and torque to 450 ft. lbs.
10. If replacing dishpan (#4), nut (#8) on gearbox output shaft should be torqued to 550 ft-lbs. minimum and secured with cotter pin (#9) with both legs bent opposite directions around the nut.
11. Replace access cover (#7) with flat washers (#10), lock washers (#11) and wing nuts (#12).
12. Reconnect main driveline to tractor PTO shaft.

Land Pride Cutter Blade Parts

Item	Part No.	Part Description
	318-586A	BLADE BOLT KIT (Item No's 1, 2, 5 & 6)
1	802-277C	BLADE BOLT 1 1/8-12 x 3 7/16 WITH KEY
2	312-075D	BLADE SPACER 16 GA. (.06")
2	312-082D	BLADE SPACER 18 GA. (.062")
2	312-089D	BLADE SPACER 20 GA. (.036")
2	312-808D	BLADE SPACER 24 GA. (.024")
3	820-249C	CUTTER BLADE 1/2 x 4 x 23 CW
4	318-399D	LARGE ROUND DISHPAN .19
5	804-147C	WASHER FLAT 1 HARD ASTMF436
6	803-170C	NUT HEX TOP LOCK 1 1/8-12 PLATE

Drivelines With Slip Clutches

CAUTION

Engage parking brake, disengage PTO, shut off tractor, and remove key before working on or around the driveline and/or slip clutch.

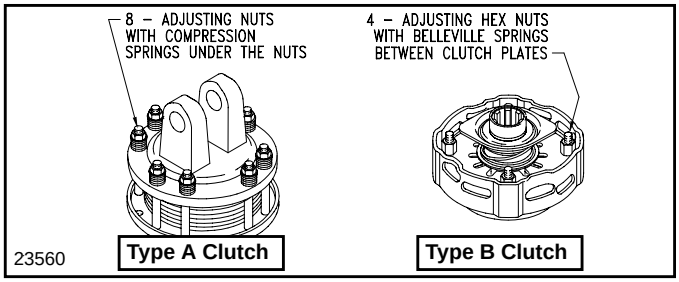
CAUTION

Slip clutches that have been in use or have been slipped for only two or three seconds during run-in may be too hot to touch. Allow a hot clutch to cool before working on it.

Cutter drive components are protected from shock loads by a friction slip clutch. The clutch must be capable of slippage during operation to protect the gearbox, driveline and other drive train parts.

Friction clutches should be "run-in" prior to initial operation and after long periods of inactivity to remove any oxidation that may have accumulated on the friction surfaces. Repeat "run-in" instructions at the beginning of each season and when moisture and/or condensation seizes the inner friction plates.

Refer to Figure 5-4 to determine which friction clutch your cutter has. Follow run-In, disassembly and assembly instructions for your specific clutch.


8 – ADJUSTING NUTS WITH COMPRESSION SPRINGS UNDER THE NUTS
4 – ADJUSTING HEX NUTS WITH BELLEVILLE SPRINGS BETWEEN CLUTCH PLATES
23560
Type A Clutch
Type B Clutch

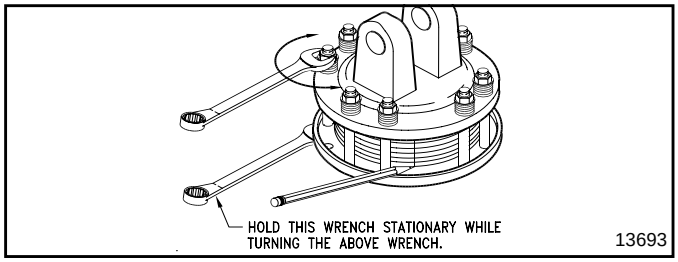
Clutch Types
Figure 5-4

Type A Clutches

Clutch Run-In

Refer to Figure 5-5:

1. Using a pencil or other marker, scribe a line across the exposed edges of the clutch plates and friction disks.



Type A Clutch Run-In
Figure 5-5

2. Carefully loosen each of the 8 spring retainer nuts by exactly 2 revolutions. It will be necessary to hold hex end of retainer bolt in order to count the exact number of revolutions.
3. Make sure the area is clear of all bystanders and machine is safe to operate.
4. Start tractor and engage PTO drive for 2-3 seconds to permit slippage of the clutch surfaces. Disengage PTO, then re-engage a second time for 2-3 seconds. Disengage PTO, shut off tractor and remove key. Wait for all components to stop before dismounting from tractor.
5. Inspect clutch and ensure that the scribed markings made on the clutch plates have changed position. Slippage has not occurred if any two marks on the friction disk and plate are still aligned. A clutch that has not slipped must be disassembled to separate the friction disk plates. See “Clutch Disassembly, Inspection & Assembly” below.
6. Tighten each of the 8 spring retainer nuts on the clutch housing exactly 2 revolutions to restore clutch to original setting pressure.
7. Allow clutch to cool to ambient temperature before operating again. Clutch is now ready for use.
8. The clutch should be checked during the first hour of cutting and periodically each week. An additional set of scribe marks can be added to check for slippage. See Figure 5-7 to adjust spring length.

Clutch Disassembly, Inspection & Assembly

Refer to Figure 5-7:

If clutch run-in procedure above indicated that one or more friction disks did not slip, then the clutch must be disassembled to separate the friction disks.

Disassembly

IMPORTANT: Not all Type A clutch components are arranged as illustrated in Figure 5-6. Also some have more components than others. Be sure to keep track of order and orientation of your clutch components during disassembly.

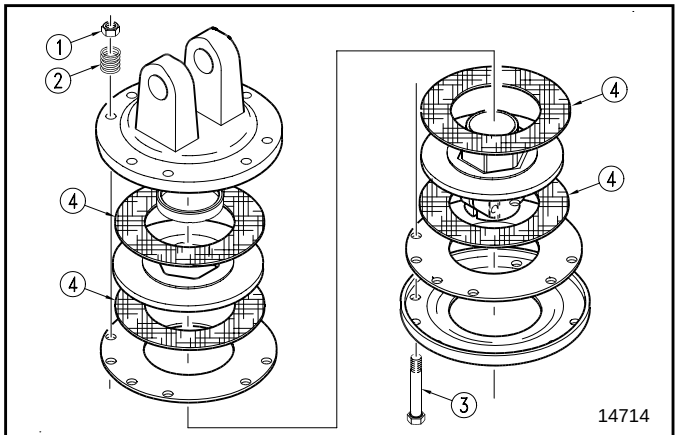
Disassembly of clutch is simply a matter of first removing spring retainer nuts (#1), springs (#2) and bolts (#3) from the assembly. Each friction disk (#4) must then be separated from the metal surface adjacent to it.

Inspection

Inspect all parts for excessive wear and condition. Clean all parts that do not require replacement.The original friction disk thickness is 1/8" (3.2mm) and should be replaced if thickness falls below 3/64" (1.1mm). If clutches have been slipped to the point of “smoking”, the friction disks may be damaged and should be replaced. Heat build-up may also affect the yoke joints.

Assembly

Reassemble each friction disk (#4) next to the metal plate it was separated from. Install bolts (#3) through the end plates and intermediate plates as shown. Place springs (#2) over the bolts and secure with nuts (#1).

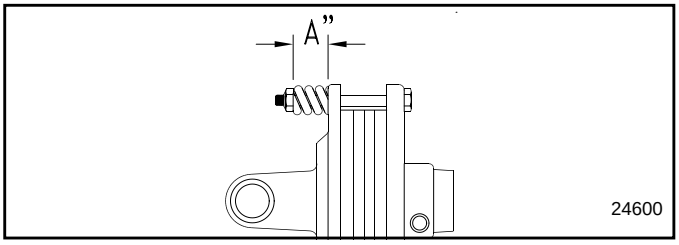


IMPORTANT: Keep track of order and orientation of your clutch components during disassembly

Type A Clutch Disassembly
Figure 5-6

Refer to Figure 5-7 & Table Below:

Progressively tighten each spring retainer bolt until correct spring height “A” is reached.



Clutch Adjustment
Figure 5-7

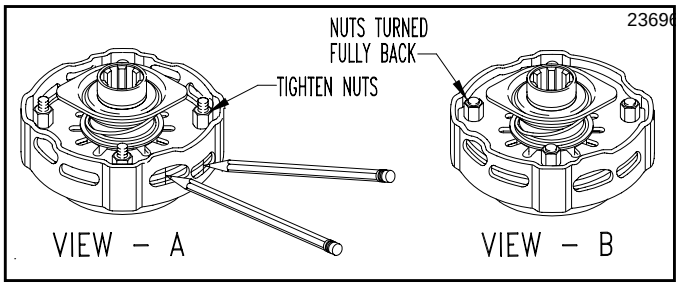
Driveline No.	PTO Speed	Cat. No.	Driveline Location	A" Spring Height
826-494C	540/1000	5	Wing	1.32"
826-495C	540/1000	5	Center	1.32"

Type B Clutches

Clutch Run-In

Refer to Figure 5-8 (View - A):

1. Using a pencil or other marker, scribe a line across the exposed edges of the clutch plates and friction disks.
2. Tighten all 4 nuts uniformly until spring load is low enough that the clutch slips freely with PTO engaged.



Type B Clutch Run-In
Figure 5-8

3. Make sure the area is clear of all bystanders and machine is safe to operate.
4. Start tractor and engage PTO for 2-3 seconds to permit slippage of clutch surfaces. Disengage PTO, then re-engage a second time for 2-3 seconds. Disengage PTO, shut off tractor and remove key. Wait for all components to stop before dismounting from tractor.
5. Inspect clutch and ensure that the scribed markings made on the clutch plates have changed position. Slippage has not occurred if any two marks on the friction disk and plate are still aligned. A clutch that has not slipped must be disassembled to separate the friction disk plates. See “Clutch Disassembly, Inspection & Assembly” below.

Refer to Figure 5-8 (View - B):

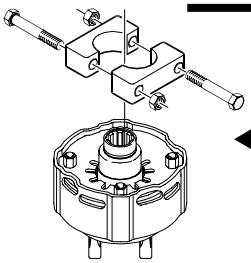
6. If no two marks on the friction disk and plate are still aligned, Turn all 4 nuts fully back.
7. Allow clutch to cool to ambient temperature before operating again. Clutch is now ready for use.
8. The clutch should be checked during the first hour of cutting and periodically each week. An additional set of scribe marks can be added to check for slippage.

Clutch Disassembly, Inspection & Assembly

If clutch run-in procedure above indicated that one or more of the friction disks did not slip, then the clutch must be disassembled to separate the friction disks.

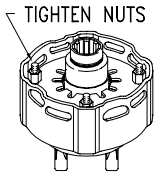
NOTE: Before proceeding, secure clutch firmly in a vise or other clamping device to prevent injury.

4-Plate Disassembly



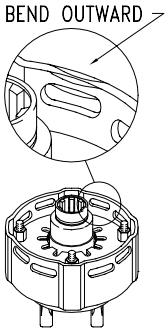
◀ Step 1

If included, remove end half clamps.



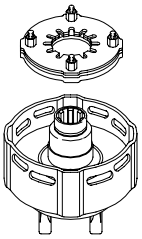
◀ Step 2

Tighten the four hex nuts uniformly until the clutch pack and hub are loose.



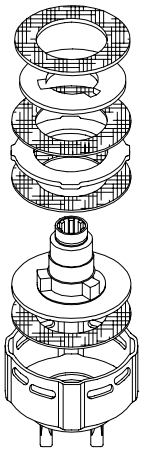
◀ Step 3

Bend all four retaining lugs out on edge of clutch housing.



◀ Step 4

Remove thrust plate with Belleville Springs and lug rings to access friction discs and hub for inspection or service.

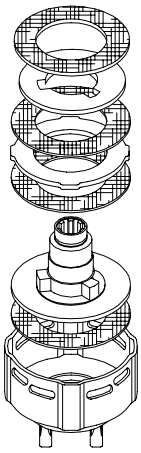


◀ Step 5

Inspect friction discs and hub.

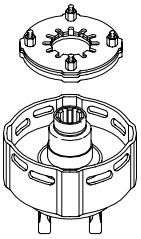
23553

4-Plate Assembly



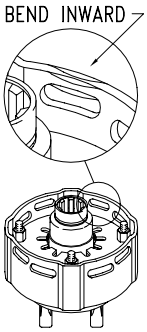
◀ Step 1

Place hub and friction discs into the housing.



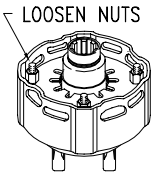
◀ Step 2

Compress Belleville Springs to the pressure plate by tightening the four hex nuts and then placing the assembly into the clutch housing.



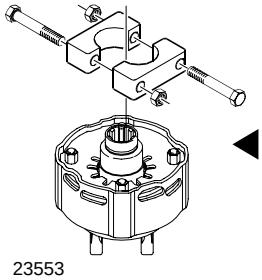
◀ Step 3

Bend retaining lugs inward over the Belleville Spring edges to secure the spring before backing the four hex nuts off.



◀ Step 4

With lugs bent in, loosen the four hex nuts completely to the end of the threaded studs.



◀ Step 5

Install end half clamps if available.

23553

Skid Shoe Maintenance

WARNING

Excessive wear on skid shoes may cause inadequate operation of cutter and create a safety hazard!

There are two skid shoes mounted on either side of the center section and one skid shoe mounted on each wing section. Check all skid shoes for wear and replace if necessary. Order only genuine Land Pride parts from your local Land Pride Dealer.

Land Pride Skid Shoe Replacement Parts

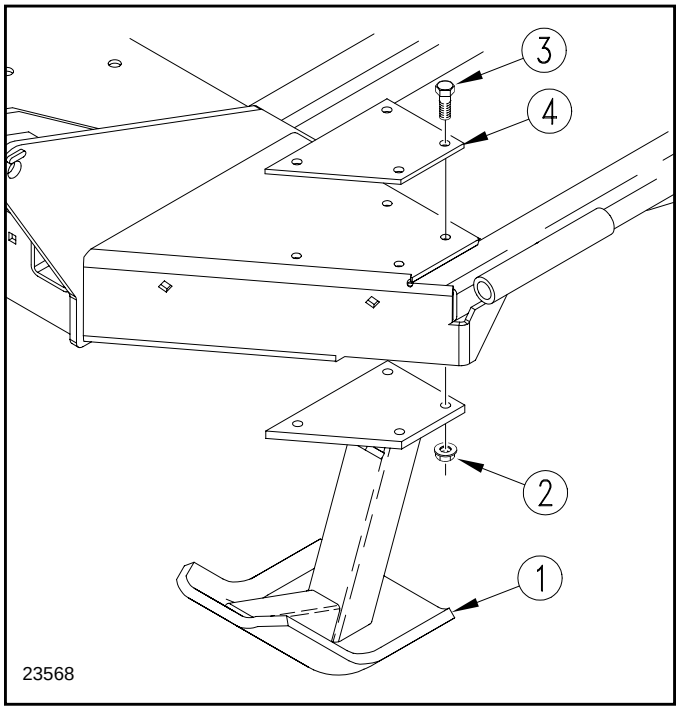
Part No.	Part Description
318-145H	CENTER SKID SHOE (RH)
318-146H	CENTER SKID SHOE (LH)
318-335D	WING SKID SHOE
802-466C	PLOW BOLT, 3/8" - 16 x 1 1/1/4" grade 5

Center Skid Shoe

Refer to Figure 5-9:

Replace center skid shoes as follows:

1. Remove 1/2"-13 hex whiz nuts (#2), 1/2" -13 x 2" GR8 hex bolts (#3) and center skid shoe (#1) as shown.
2. Attach new skid shoe (#1) to cutter with existing 1/2" hex bolts (#3), existing top plate (#4) and secure with existing 1/2" hex lock nuts. Torque to 105 ft. lbs.
3. Repeat on opposite side of center section.



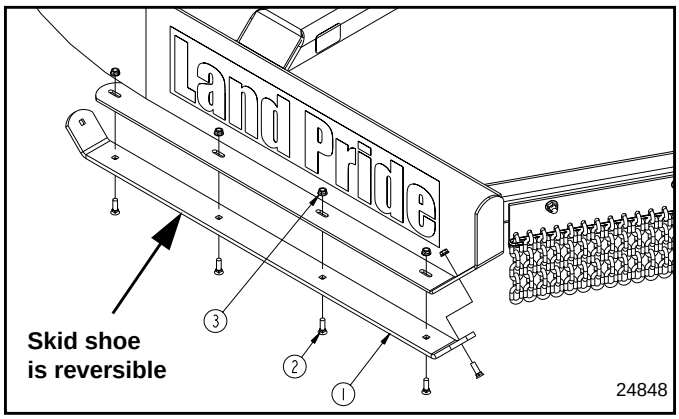
Center Skid Shoe
Figure 5-9

Wing Skid Shoe

Refer to Figure 5-10:

Reverse or replace wing skid shoes as follows:

1. Remove 3/8" hex whiz nuts (#3), 3/8" plow bolts (#2) and wing skid shoe (#1) as shown.
2. Plow bolts (#2) should be checked for wear and replaced if necessary.
3. Reverse existing skid shoe and reattach or attach new skid shoe with 3/8”-16 x 1 1/4” GR 5 plow bolts (#2). Secure with 3/8" hex whiz nuts. Torque nuts to 31 ft. lbs.



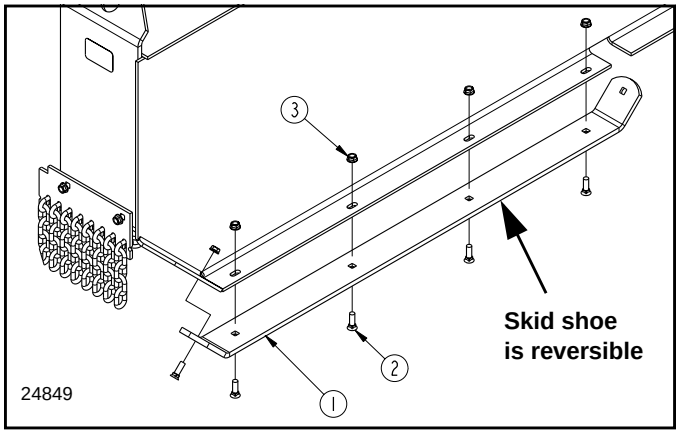
Wing Skid shoe
Figure 5-10

Weight Box Skid Shoe

Refer to Figure 5-11:

Reverse or replace weight box skid shoes as follows:

1. Remove 3/8" hex whiz nuts (#3), 3/8" plow bolts (#2) and wing skid shoe (#1) as shown.
2. Plow bolts (#2) should be checked for wear and replaced if necessary.
3. Reverse existing skid shoe and reattach or attach new skid shoe with 3/8”-16 x 1 1/4” GR 5 plow bolts (#2). Secure with 3/8" hex whiz nuts. Torque nuts to 31 ft. lbs.



Wing Skid shoe
Figure 5-11

Storage

It is good practice to clean, inspect, service and make necessary repairs to the cutter when parking it for long periods and when parking it at the end of a working season. This will help ensure the cuter is ready for field use the next time you hook-up to it.

DANGER

Always disconnect main driveline from tractor PTO and secure cutter deck in the up position with solid supports before servicing the underside of the cutter.

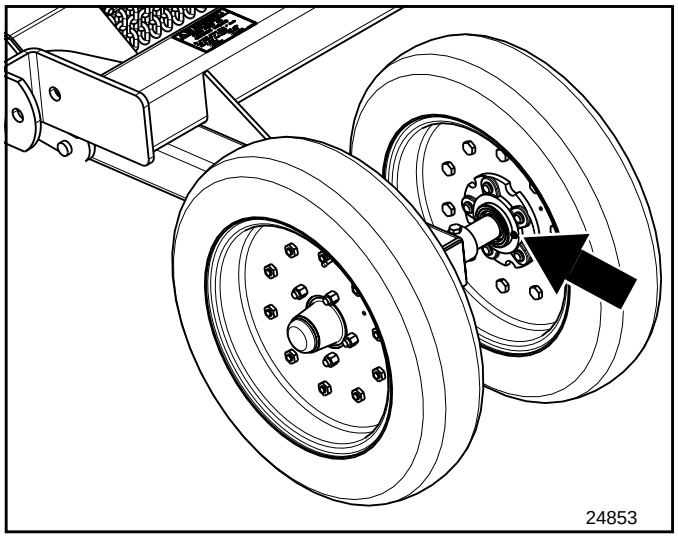
1. Clean off any dirt and grease that may have accumulated on the cutter and moving parts. Scrape off compacted dirt from the bottom of deck and then wash surface thoroughly with a garden hose. A coating of oil may also be applied to the lower deck area to minimize oxidation.
2. See **“Tractor Maintenance” on page 24**. Check blades and blade bolts for wear and replace if necessary.
3. Inspect for loose, damaged or worn parts and adjust or replace as needed.
4. Lubricate as noted in “Lubrication Points” starting on page 30.
5. Replace all damaged or missing decals.
6. Store cutter on a level surface in a clean, dry place. Inside storage will reduce maintenance and make for a longer cutter life.
7. Follow all unhooking instructions on page 15 when disconnecting tractor from cutter.
8. Repaint parts where paint is worn or scratched to prevent rust. Ask your dealer for Aerosol Land Pride touch-up paint. They are also available in touch-up bottles with brush, quarts and gallon sizes by adding TU, QT or GL to the end of the Aerosol part number.

Land Pride Touch-up Paint

Part No.	Part Description
821-011C	PAINT LP BEIGE SPRAY CAN
821-002C	PAINT LP BLACK SPRAY CAN
821-054C	PAINT MEDIUM RED SPRAY CAN
821-058C	PAINT GREEN SPRAY CAN

Lubrication Points

Lubrication Legend	Multi-purpose spray lube	Multi-purpose grease lube	Multi-purpose oil lube	50 hrs	Intervals in hours at which lubrication is required



50 Hrs

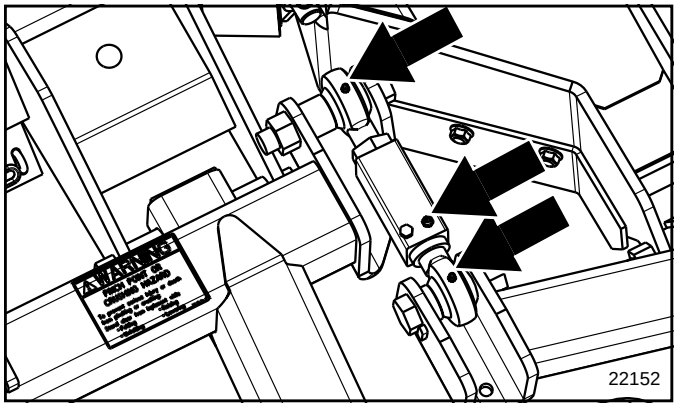
Axle Hub Bearing

Repack wheel bearings

Type of Lubrication: Wheel Bearing Grease

Quantity = Coat Generously

NOTE: The tailwheel hub is equipped with a relief hole located directly opposite the grease fitting. The relief hole releases pressure from inside the hub casting when it is greased. The hub should be greased until grease purges from the relief hole.

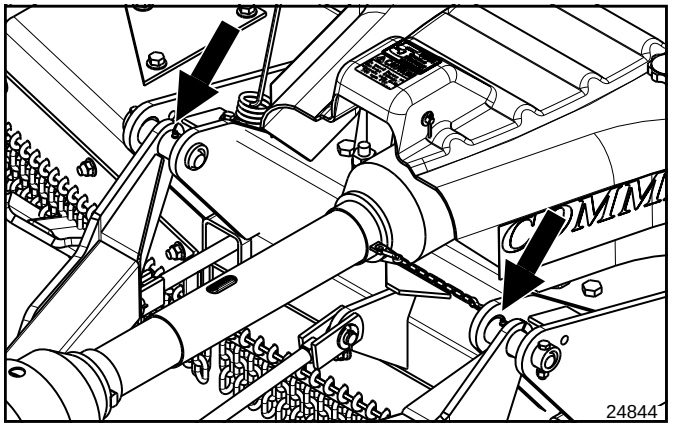


50 Hrs

Adjustable Turnbuckle

Type of Lubrication: Multi-Purpose Grease

Quantity = As required

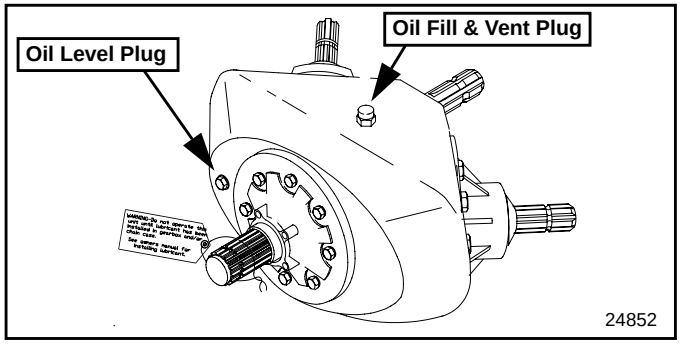


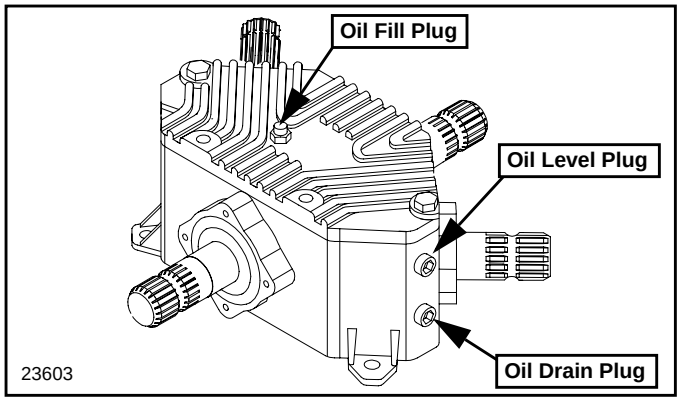
50 Hrs

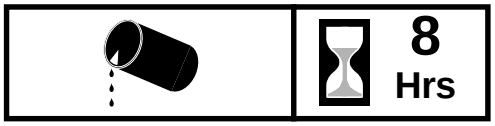
Main Hitch

Type of Lubrication: Multi-Purpose Grease

Quantity = As required





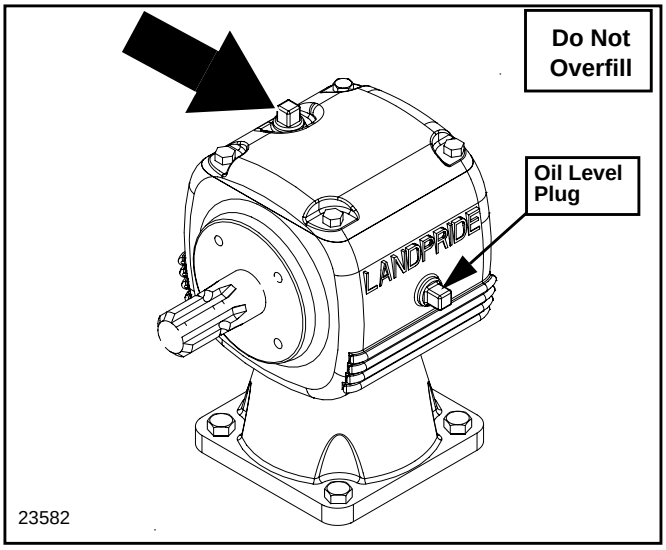


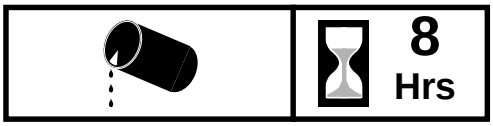
Divider Box

Type of Lubrication: 80-90W EP

Quantity = As required

NOTE: Do not overfill! Cutter should be level when checking oil. If, for any reason, all oil has been removed from gearbox, refill to level plug and allow air to bleed up from lower cavity, then recheck.





Gearbox

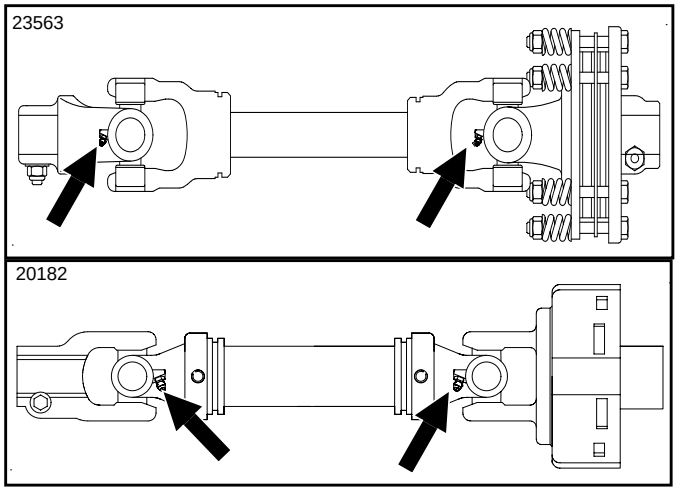
IMPORTANT: Do not overfill! Level cutter and wait for gearbox oil to cool before checking. An unlevel cutter or a gearbox with hot oil will not show correct oil level on the dipstick.

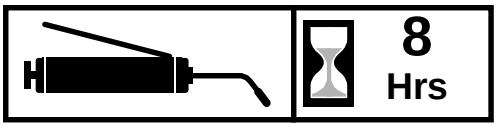
Make sure wings are down. Unscrew top vent plug in gearbox to remove dipstick. Wipe oil from dipstick and screw it back in without tightening. Unscrew dipstick and check oil level mark. If low, fill through top plug hole in gearbox with EP 80-90W oil until oil reaches full mark on the dipstick. Reinstall vent plug with dipstick and tighten.

Take your gearbox to a Land Pride dealer if it requires service.

Type of Lubrication: Gear Lube 80-90W EP

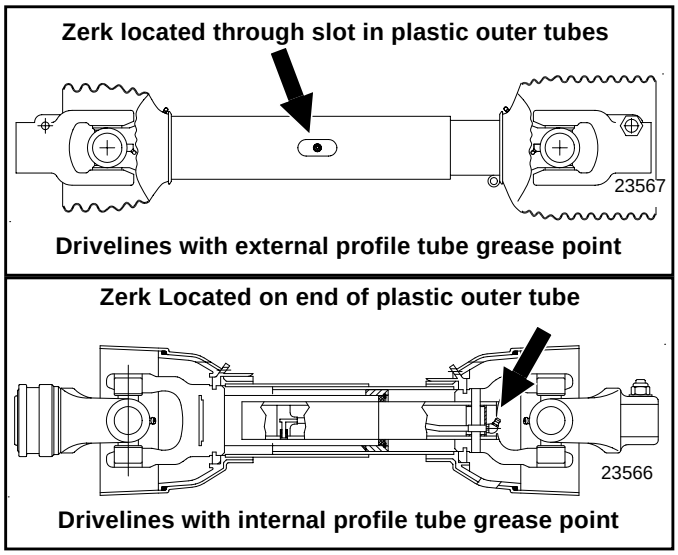
Quantity = Fill until oil reaches full mark on dipstick.

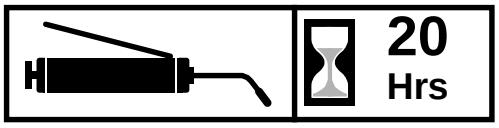




Intermediate Driveline Joints

Type of Lubrication: Multi-purpose Grease

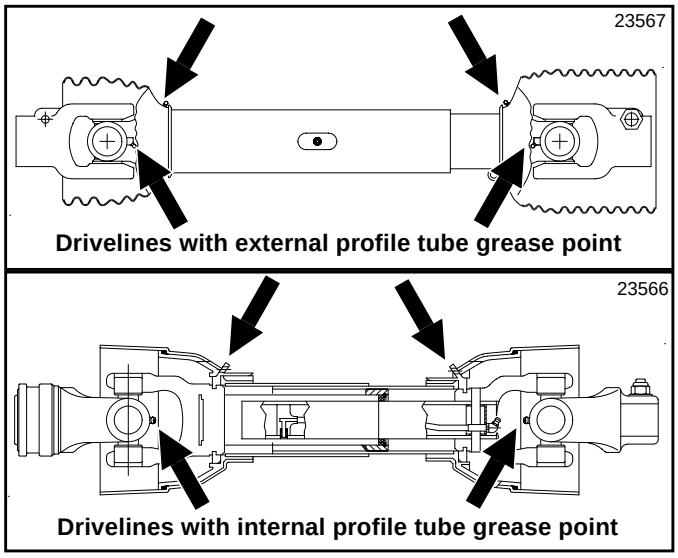

Zerk located through slot in plastic outer tubes
23567
Drivelines with external profile tube grease point
Zerk Located on end of plastic outer tube
23566
Drivelines with internal profile tube grease point

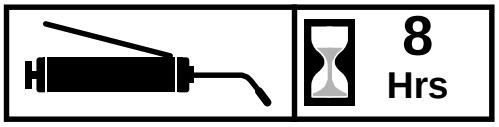


Conventional Driveline Profile Tubes

Type of Lubrication: Multi-purpose Grease

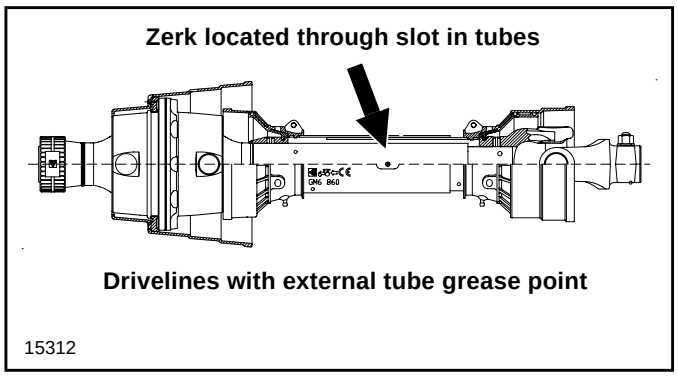
Quantity = Coat Generously

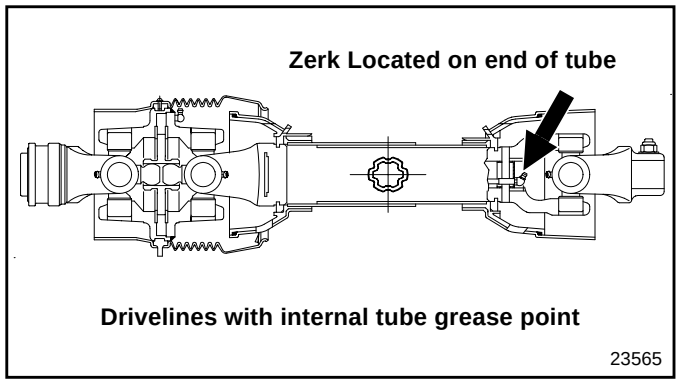


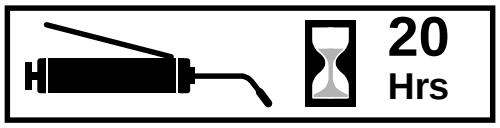


Conventional Driveline Joints & Shields

Type of Lubrication: Multi-purpose Grease



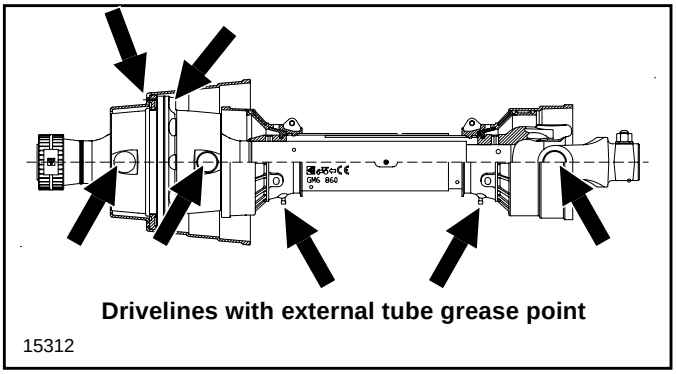


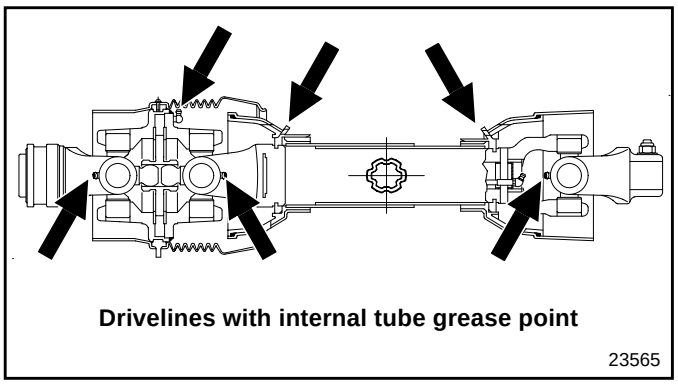


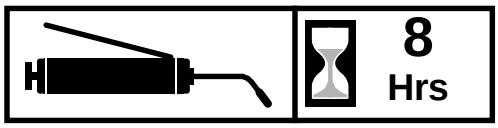
Constant Velocity Driveline Profile Tubes

Type of Lubrication: Multi-purpose Grease

Quantity = Coat Generously





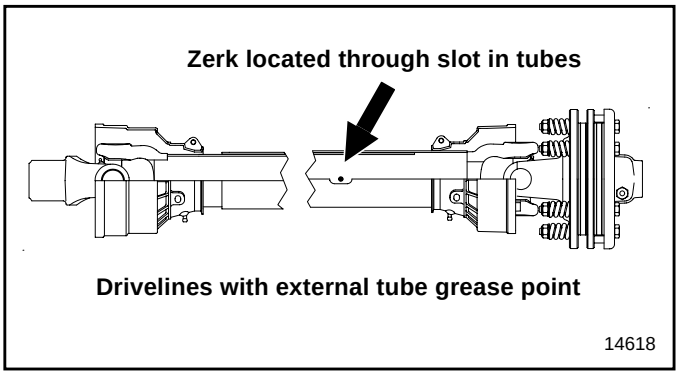


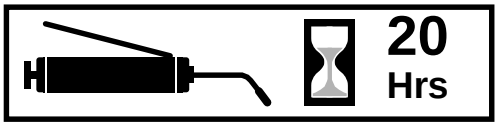
Constant Velocity Driveline Joints & Shields

Type of Lubrication: Multi-purpose Grease

NOTE: To extend the life of the constant velocity joint, extensive lubrication must be performed every 8 hours of operation.

- The constant velocity joint should be greased in a straight position forcing grease through the passages and into the cavity. After lubrication, grease should be visible around the ball joints.
- The constant velocity driveline comes equipped with a grease zerk in the outer telescoping member and must be greased every 8 hours to prevent premature failure of the joint.
- Grease fittings are located on the u-joints and driveline shields and should be lubricated every 8 hours of operation.

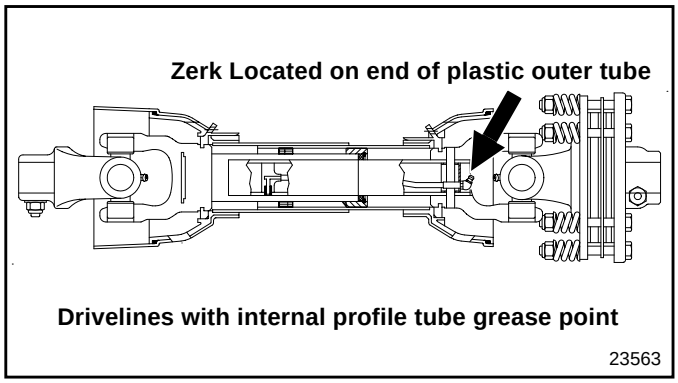


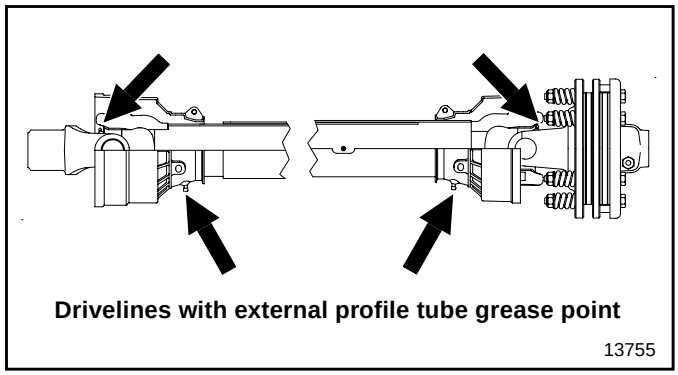


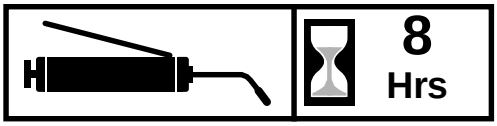
Wing Driveline Profile Tubes

Type of Lubrication: Multi-purpose Grease

Quantity = Coat Generously

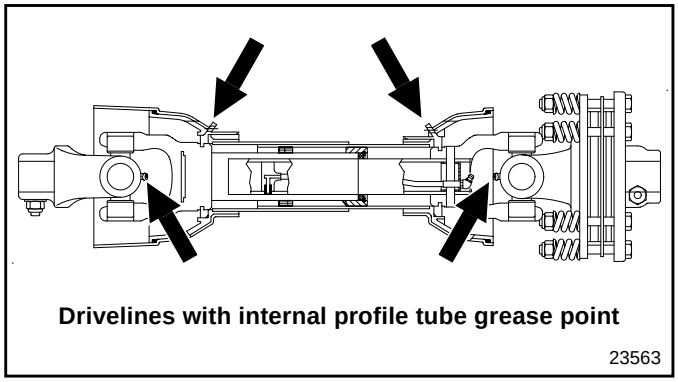






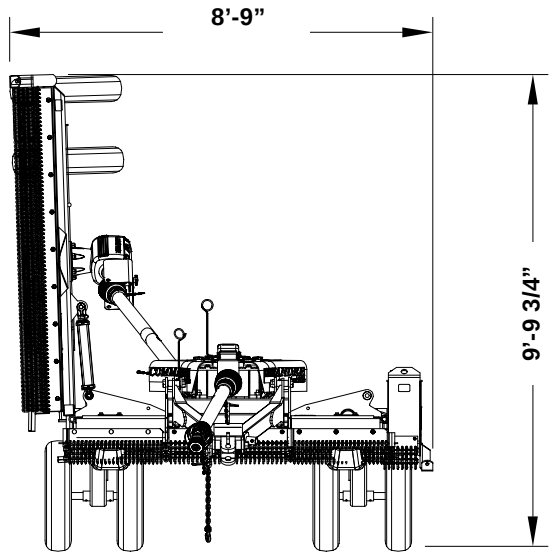
Wing Driveline Joints & Shields

Type of Lubrication: Multi-purpose Grease

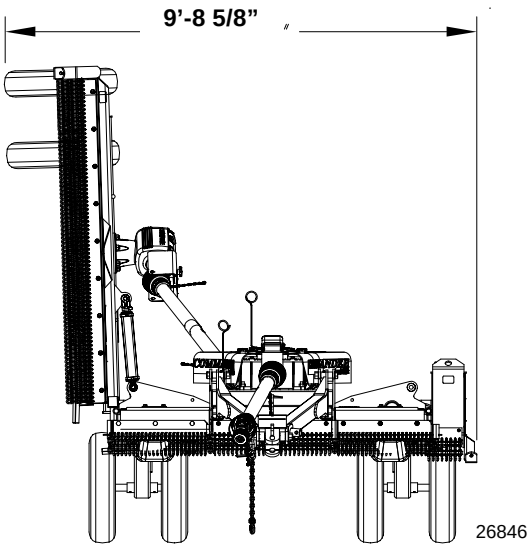


RC5014 and RCM5014 Series

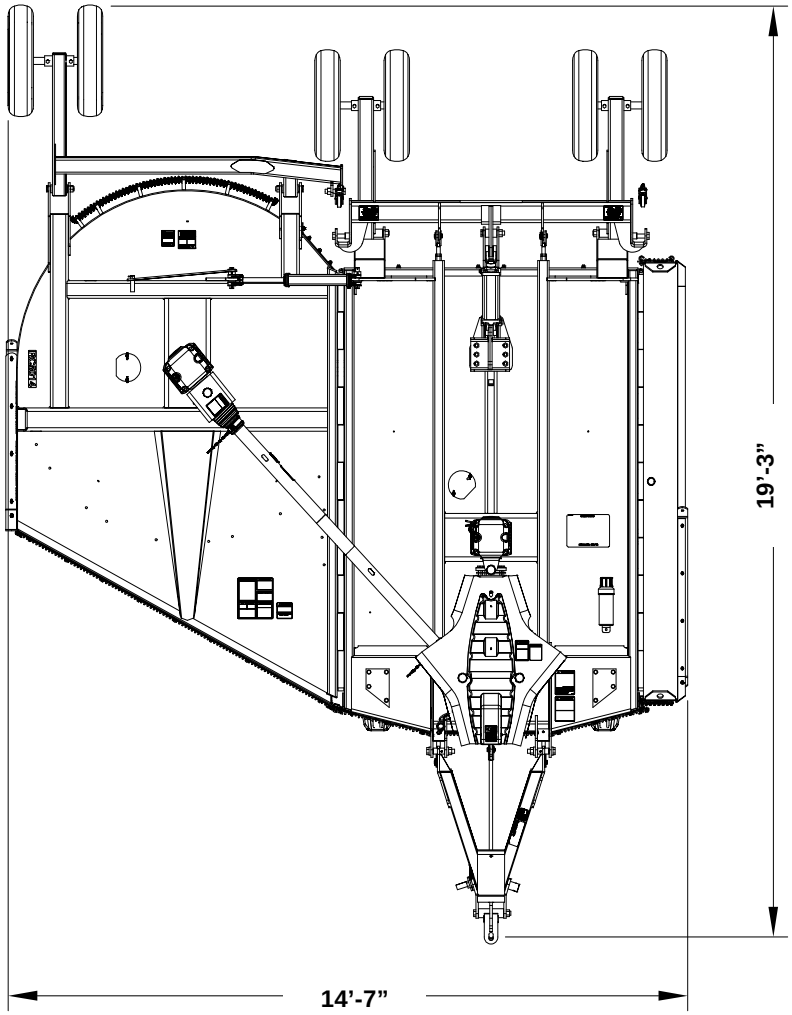
	RC5014 & RCM5014
Min. PTO Horse Power	70
Gear Box Horsepower	250 HP Splitter 210 HP Center & wing
Gear Box Lubrication	Gear Lube 80-90W EP
Cutting Capacity	Up To 3" Material
Machine Weight	7,078 lbs. Approx. (With single row chain guards, 6 laminated tires, dual axle, 540 CV main driveline)
Blade Tip Speed @ 540 RPM	Center blade: 17,377 FPM Wing blade: 17,329 FPM
@1000 RPM	Center blade: 18,165 FPM Wing blade:18,317 FPM
Tongue Weight	2300 lbs.
Hitch Jack	Standard hand crank
Hitch Type	Pull-Type, Self-Leveling Hitch & Clevis
Wing Offset	Right wing model with weight box on left side
Cutting Width **Overall Width** **Minimum Transport Width**	13'-6" 14'-7" 8'-9"
Overall Length	19'-3"
Deck Height	10 1/2"
Cutting Height	2" to 14" High with hydraulic cylinder and stroke control spacers
Deck Material Thickness	3/16"
Side Skirt Thickness	1/4"
Skid Shoes	**Wing and Weight Box:** Reversible & replaceable **Center Deck:** 2 - Replaceable
Blades - 4 (2 per Carrier)	1/2" x 4" Thru-harden free swinging alloy steel with uplift
Blade Overlap	6"
Blade Bolt	Keyed with hardened flat washer & lock nut
Blade Holder	3/16" Round bolt-on stump-jumper with 1" diamond shaped blade bar
Deck Ring	Optional 1/2" x 3" fully welded
Front & Rear Guards	Optional rubber, single chain or double chain
Heavy Duty **Input Driveline Options**	Conventional u-joint ASAE Category 5 with 1 3/8"-21 spline Constant velocity u-joint ASAE Category 5 with 1 3/8"-21 spline or 1 3/4"-20 spline
Heavy Duty **Connecting Drivelines**	ASAE Cat. 5 with slip-clutch
Tire Options	6" x 21" Laminated tires or 27" x 7.75" x 15" Used aircraft tires w/wo foam filling or 15" Rims
Wheel Options	5 or 6 Wheels
Transport Axle	Spring-cushioned on center transport axle
Hubs	Cast iron 5-bolt hubs with tapered roller bearings and with 1 3/4" shafts
Colors	Standard color: Beige Optional colors: Green or Red

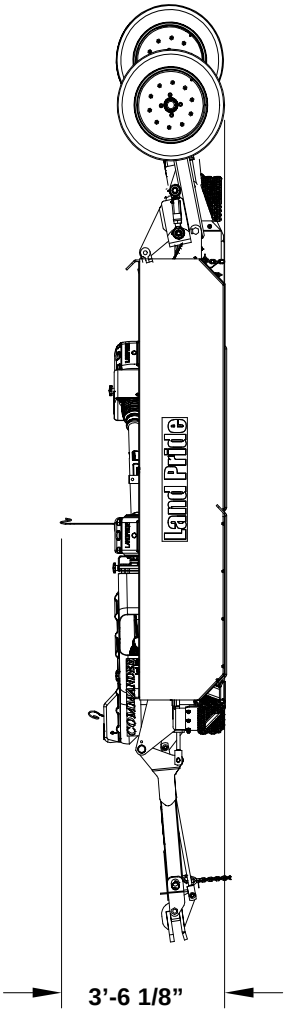


Transport Width With Wing Axles Disconnected At The Turnbuckles And Wheels Folded Back (See Figure 1-5 on page 12)



Transport Width With Wing Axles Connected At The Turnbuckles





At 2” Cutting Height

RC5014 and RCM5014

Features	Benefits
Surpass rugged industry	All Land Pride Cutters have been designed and tested and meet rigorous voluntary testing procedures specified by ANSI.
Total cutter weight	Weight is in a range that will allow tractors to handle the cutter easier. Heavier cutters are tough to control.
Fully welded deck	Fully welded deck adds strength.
Factory assembled	Saves customer set-up time and money.
5 Year gearbox warranty	Shows confidence in gearbox.
250 HP splitter gearbox	High gearbox rating for rough work and high horsepower tractors.
210 HP blade gearboxes	High gearbox rating for 3" cutting capacity and high horsepower tractors.
Gearbox seal protection	Gearbox bottom seal protection for longer bearing life.
2 3/8” Output gearbox shaft	Large output shaft handles shock loads better.
540 or 1000 RPM PTO speed	Fits wide variety of tractors including high horsepower tractors.
Cat. 5 Input driveline	Holds up to shock loads and harsh mowing conditions. Fits wide range of tractors including high horsepower tractors.
Star profile drivelines	Star profile spreads load out to many points on the shaft. More apt to resist bending and twisting under shock loads and harsh mowing conditions.
Easy greasable drivelines	Drivelines have access holes for greasing the U-joints in the driveline and to grease the inner profiles.
4 Plate slip-clutch	Protects drivelines and gearboxes by slipping clutches rather than twisting the driveline when impacts are encountered.
Keyed blade bolt	Makes removing the cutting blades easier.
Thru-harden blades	Provides longer life than standard heat treating.
High blade tip speed	540 rpm: Center: 17,377 fpm, Wings: 17,329 fpm 1000 rpm: Center: 18,165 fpm, Wings: 15,013 fpm Allows for a clean cut of material and even distribution.
6” Blade overlap	Generous blade overlap eliminates skipping, especially in turns.
High cutting capacity	Can cut brushy areas with saplings up to 3”.
10 1/2” Deck height	Handles heavy cutting, which reduces balling-up of cut material under the deck.
2” - 14” Cutting height	Vary cutting height on the go for varied conditions.
3/16” Stump jumper backed with a 1" thick mounting bar	Heavy round stump jumper with bottom gearbox seal protector. Can hold up to tough conditions.
3/16” Deck thickness	Heavy enough to handle conditions but not weigh unit down.
1/4” Side skirt thickness	Extra thick on sides to handle debris contact.
Skid shoes	Wing & weight box skid shoes can be reversed for extended life. Wing, weight box and center deck skid shoes can be replaced when damaged or worn out.
Self-leveling pull-type hitch	Reduces drawbar wear by keeping hitch level while going through ditches.

RC5014 and RCM5014

Features	Benefits
Hinged wing section	Allow cutter to follow terrain. Ideal for rough ground where hillsides, ditches and hollows can cause uneven cutting.
1” Solid hinge rods	Larger diameter hinge rod gives greater strength to the cutter from front to rear, and in the hinge area itself.
Wing hydraulics	3 1/2” x 12” Cylinder to handle the large wing deck.
Wing transport locks	Safety feature. Holds wing section up in case of hydraulic pressure loss.
8’ - 9” Transport width	Transport width is safe and legal in most communities.
Enclosed front to rear dual leveling rods	Dual leveling rods enable the cutter to pull equally on the rear axle during travel over rough terrain. Many competitors only use one leveling rod.
5-Bolt hubs	5-Bolt hubs makes the wheel assembly more durable and longer lasting.
Drain holes in wheel rims	Allows water to drain from wheels mounted on the folded-up wing. Helps prevent paint deterioration and rusting to the wheel rims.
5” Square rear axle tubing	Heavy axle to handle harsh conditions.
Spring-cushioned center-axle	Protects unit from bumps and ground shock.
Replaceable wheel spindles	Wheel spindles can be replaced when damaged without replacing the entire axle. Simply remove two bolts to replace damaged spindle.
Features and Benefits Of Optional Equipment	
5 or 6 Wheel option	Outer wing wheel can be single (5-wheel option) or dual (6-wheel option). Dual wheels on the outer wing is ideal when mowing in areas where the wing needs to flex up hill. The outer wheel rides farther up the embankment and keeps the deck from gouging. Also, the extra wheel on the outer wing deck provides better load distribution.
Wheel options	**Laminated tires:** Eliminates flats. **Airplane tires without foam filling:** Give better cushion while transporting. **Airplane tires with foam filling:** Give better cushion while transporting and can’t go flat. **15" Wheel rims:** Can mount your own tires.
Deck rings (optional)	1/2" x 3" full welded deck ring keeps blades from damaging the deck.
Front & rear shielding	Choice allows customer to fit his needs. Front Shielding: Rubber guard, single chain or double chain. Rear Shielding: Rubber guard, single chain or double chain.

Problem	Solution
Oil seal leaking	Drain to level full hole.
	Replace seals.
	Clean off wrapped material and check seal areas daily.
Driveline yoke or shock cross failing	Avoid hitting solid objects.
	Lubricate every 8 hours.
	Adjust clutch per section 4.
Slip-Clutches slip even with a light load	Replace clutch plates.
	Remove foreign object.
Bent Driveline shaft (Note: Shaft should be repaired or replaced if bent)	Reduce lift height in transport position.
	Reposition drawbar.
	Shorten Power Take Off shaft.
Driveline shaft telescoping tube failing	Avoid hitting solid objects.
Driveline shaft telescoping tube wearing	Lubricate every 20 hours of operation.
Blades wearing excessively	Raise cutting height.
Blades coming loose	Tighten blade hardware, refer to *Service Cutting Blades* in the **"Maintenance and Lubrication"** section starting on page 24.
Blades breaking	Avoid solid objects.
Loose blade carrier	Tighten shaft nut to specified torque.
	Replace gearbox bearings and / or shaft.
Blade carrier bent	Avoid hitting solid objects.
Excessive side skid wear	Adjust cutter height.
	Raise cutting height.
Excessive vibration	Inspect and unlock blades.
	Replace blade.
	Replace blade carrier.
	Replace Power Take Off or distribution shaft.
	Disassemble and inspect for incorrectly located needles or damaged bearing cap.
Wing cylinder movement too slow	Remove elbow fitting and unplug orifice.

Torque Values Chart

Bolt Size (Inches)	Bolt Head Identification: Grade 2		Grade 5		Grade 8	
in-tpi [1]	N·m [2]	ft-lb [3]	N·m	ft-lb	N·m	ft-lb
1/4" - 20	7.4	5.6	11	8	16	12
1/4" - 28	8.5	6	13	10	18	14
5/16" - 18	15	11	24	17	33	25
5/16" - 24	17	13	26	19	37	27
3/8" - 16	27	20	42	31	59	44
3/8" - 24	31	22	47	35	67	49
7/16" - 14	43	32	67	49	95	70
7/16" - 20	49	36	75	55	105	78
1/2" - 13	66	49	105	76	145	105
1/2" - 20	75	55	115	85	165	120
9/16" - 12	95	70	150	110	210	155
9/16" - 18	105	79	165	120	235	170
5/8" - 11	130	97	205	150	285	210
5/8" - 18	150	110	230	170	325	240
3/4" - 10	235	170	360	265	510	375
3/4" - 16	260	190	405	295	570	420
7/8" - 9	225	165	585	430	820	605
7/8" - 14	250	185	640	475	905	670
1" - 8	340	250	875	645	1230	910
1" - 12	370	275	955	705	1350	995
1-1/8" - 7	480	355	1080	795	1750	1290
1 1/8" - 12	540	395	1210	890	1960	1440
1 1/4" - 7	680	500	1520	1120	2460	1820
1 1/4" - 12	750	555	1680	1240	2730	2010
1 3/8" - 6	890	655	1990	1470	3230	2380
1 3/8" - 12	1010	745	2270	1670	3680	2710
1 1/2" - 6	1180	870	2640	1950	4290	3160
1 1/2" - 12	1330	980	2970	2190	4820	3560

Bolt Size (Metric)	Bolt Head Identification: 5.8 Class 5.8		8.8 Class 8.8		10.9 Class 10.9	
mm x pitch	N·m	ft-lb	N·m	ft-lb	N·m	ft-lb
M 5 X 0.8	4	3	6	5	9	7
M 6 X 1	7	5	11	8	15	11
M 8 X 1.25	17	12	26	19	36	27
M 8 X 1	18	13	28	21	39	29
M10 X 1.5	33	24	52	39	72	53
M10 X 0.75	39	29	61	45	85	62
M12 X 1.75	58	42	91	67	125	93
M12 X 1.5	60	44	95	70	130	97
M12 X 1	90	66	105	77	145	105
M14 X 2	92	68	145	105	200	150
M14 X 1.5	99	73	155	115	l215	160
M16 X 2	145	105	225	165	315	230
M16 X 1.5	155	115	240	180	335	245
M18 X 2.5	195	145	310	230	405	300
M18 X 1.5	220	165	350	260	485	355
M20 X 2.5	280	205	440	325	610	450
M20 X 1.5	310	230	650	480	900	665
M24 X 3	480	355	760	560	1050	780
M24 X 2	525	390	830	610	1150	845
M30 X 3.5	960	705	1510	1120	2100	1550
M30 X 2	1060	785	1680	1240	2320	1710
M36 X 3.5	1730	1270	2650	1950	3660	2700
M36 X 2	1880	1380	2960	2190	4100	3220

[1] in-tpi = nominal thread diameter in inches-threads per inch

[2] N· m = newton-meters

[3] ft-lb= foot pounds

[4] mm x pitch = nominal thread diameter in millimeters x thread pitch

Torque tolerance + 0%, -15% of torquing values. Unless otherwise specified use torque values listed above.

Additional Torque Values	
Blade Bolt Lock Nut	450 ft-lbs
Blade Carrier Hub Nut	550 ft-lbs minimum
Wheel Lug Nuts	85 ft-lbs

Tire Inflation Chart

Tire Size	Inflation PSI
27 x 7.75 x 15	35

Warranty

Land Pride warrants to the original purchaser that this Land Pride product will be free from defects in material and workmanship beginning on the date of purchase by the end user according to the following schedule when used as intended and under normal service and conditions for personal use.

Overall Unit and Driveline: One year Parts and Labor.
Gearbox: Five years Parts and Labor.
Hydraulic Cylinder: One year Parts and Labor.
Hoses and seals considered wear items.
Blades, tires and driveline friction discs: Considered wear items.

This Warranty is limited to the replacement of any defective part by Land Pride and the installation by the dealer of any such replacement part, and does not cover common wear items. Land Pride reserves the right to inspect any equipment or parts which are claimed to have been defective in material or workmanship.

This Warranty does not apply to any part or product which in Land Pride's judgment shall have been misused or damaged by accident or lack of normal maintenance or care, or which has been repaired or altered in a way which adversely affects its performance or reliability, or which has been used for a purpose for which the product is not designed. Misuse also specifically includes failure to properly maintain oil levels, grease points, and driveline shafts.

Claims under this Warranty should be made to the dealer which originally sold the product and all warranty adjustments must be made through an authorized Land Pride dealer. Land Pride reserves the right to make changes in materials or design of the product at any time without notice.

This Warranty shall not be interpreted to render Land Pride liable for damages of any kind, direct, consequential, or contingent to property. Furthermore, Land Pride shall not be liable for damages resulting from any cause beyond its reasonable control. This Warranty does not extend to loss of crops, any expense or loss for labor, supplies, rental machinery or for any other reason.

No other warranty of any kind whatsoever, express or implied, is made with respect to this sale; and all implied warranties of merchantability and fitness for a particular purpose which exceed the obligations set forth in this written warranty are hereby disclaimed and excluded from this sale.

This Warranty is not valid unless registered with Land Pride within 30 days from the date of purchase by the end user.

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